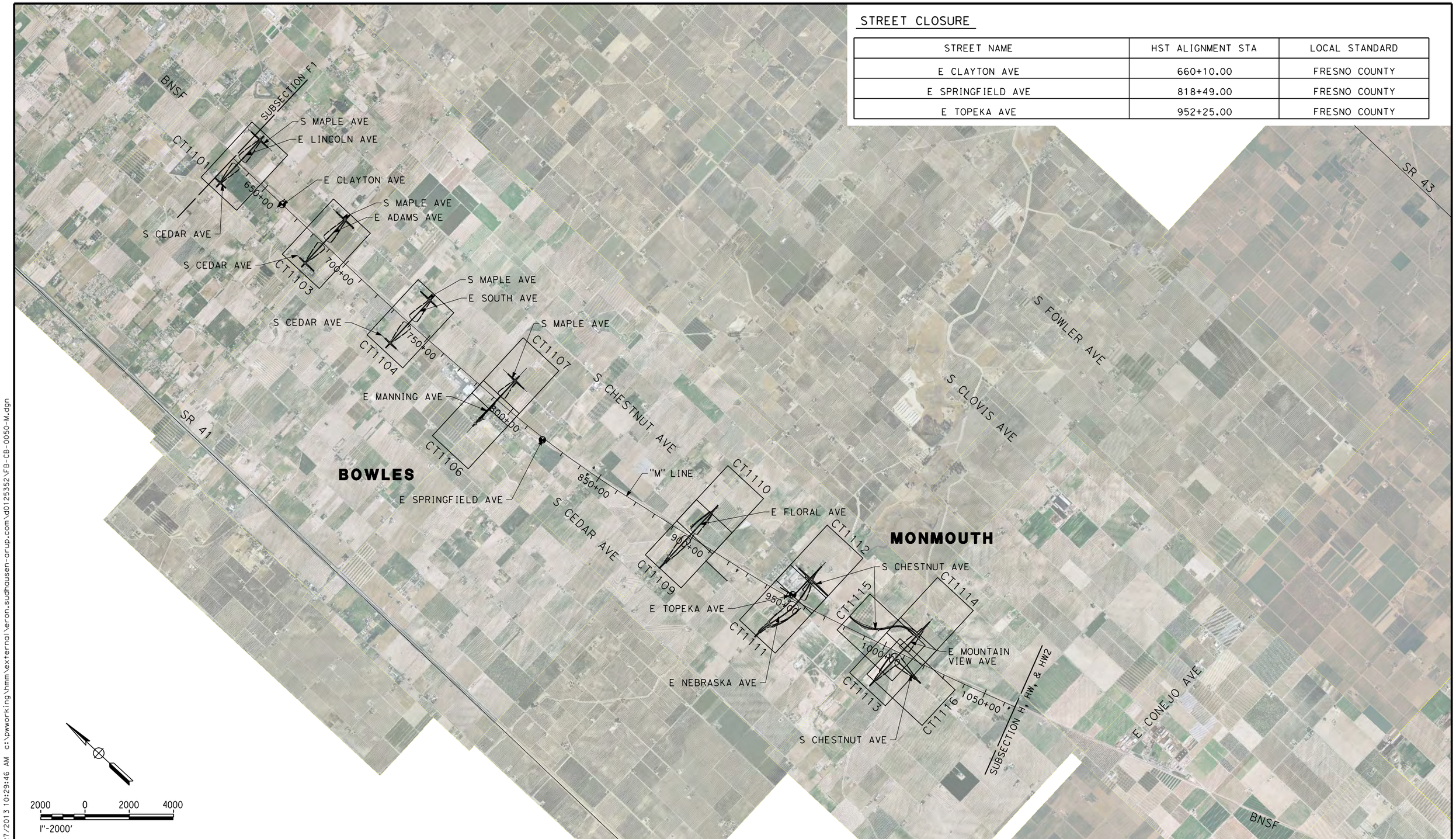
STREET CLOSURE

STREET NAME	HST ALIGNMENT STA	LOCAL STANDARD
E CLAYTON AVE	660+10.00	FRESNO COUNTY
E SPRINGFIELD AVE	818+49.00	FRESNO COUNTY
E TOPEKA AVE	952+25.00	FRESNO COUNTY



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

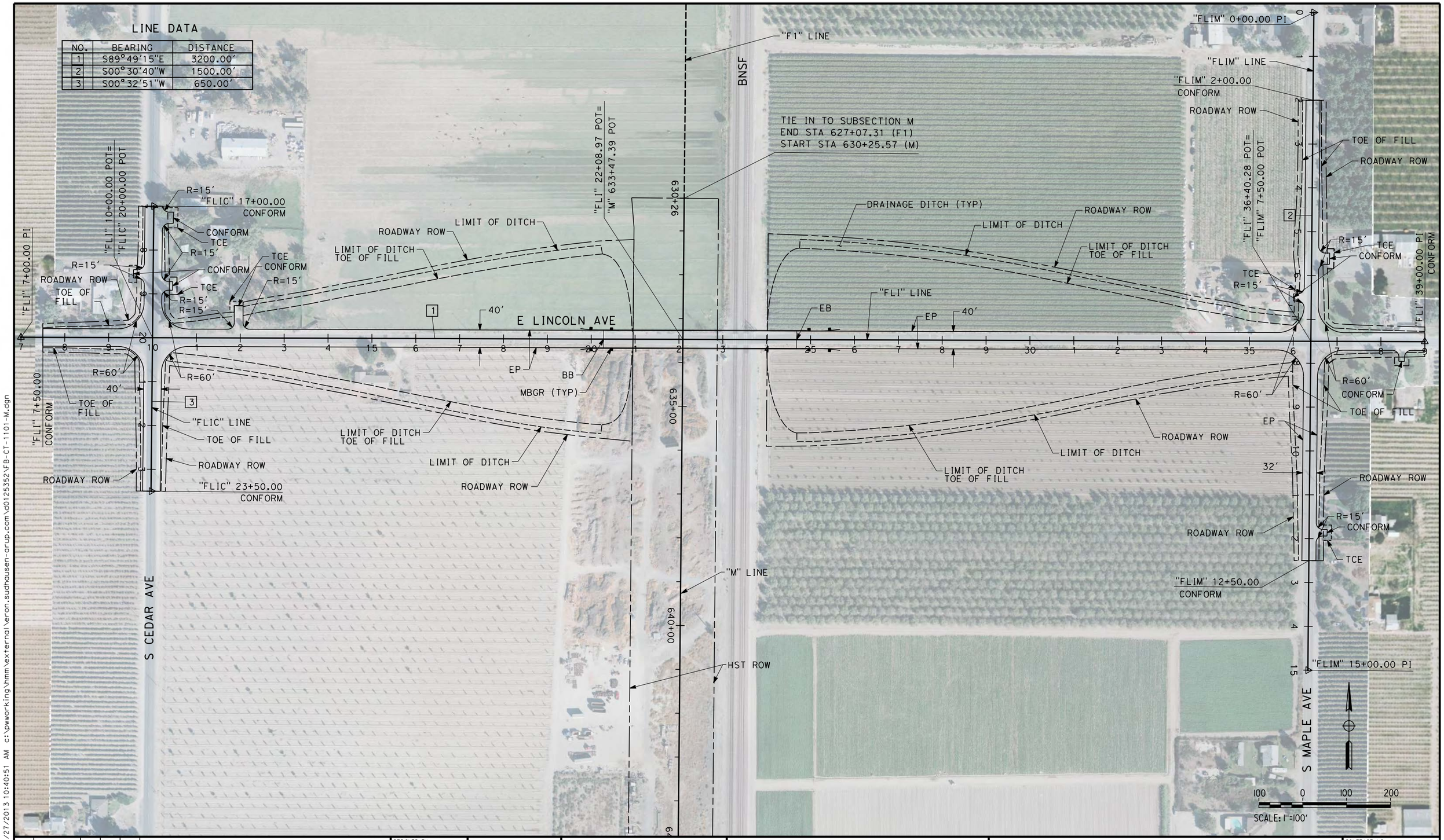
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
ROADWAY / GRADE SEPARATION
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. CB0050
SCALE AS SHOWN
SHEET NO. 1 OF 32

eron.sudhausen 12/27/2013 10:29:46 AM c:\pwworking\hmm\external\eron.sudhausen-arup.com\d0125352\FB-CB-0050-M.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD

MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION LAYOUT
E LINCOLN AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT1101
SCALE AS SHOWN
SHEET NO. 2 OF 32

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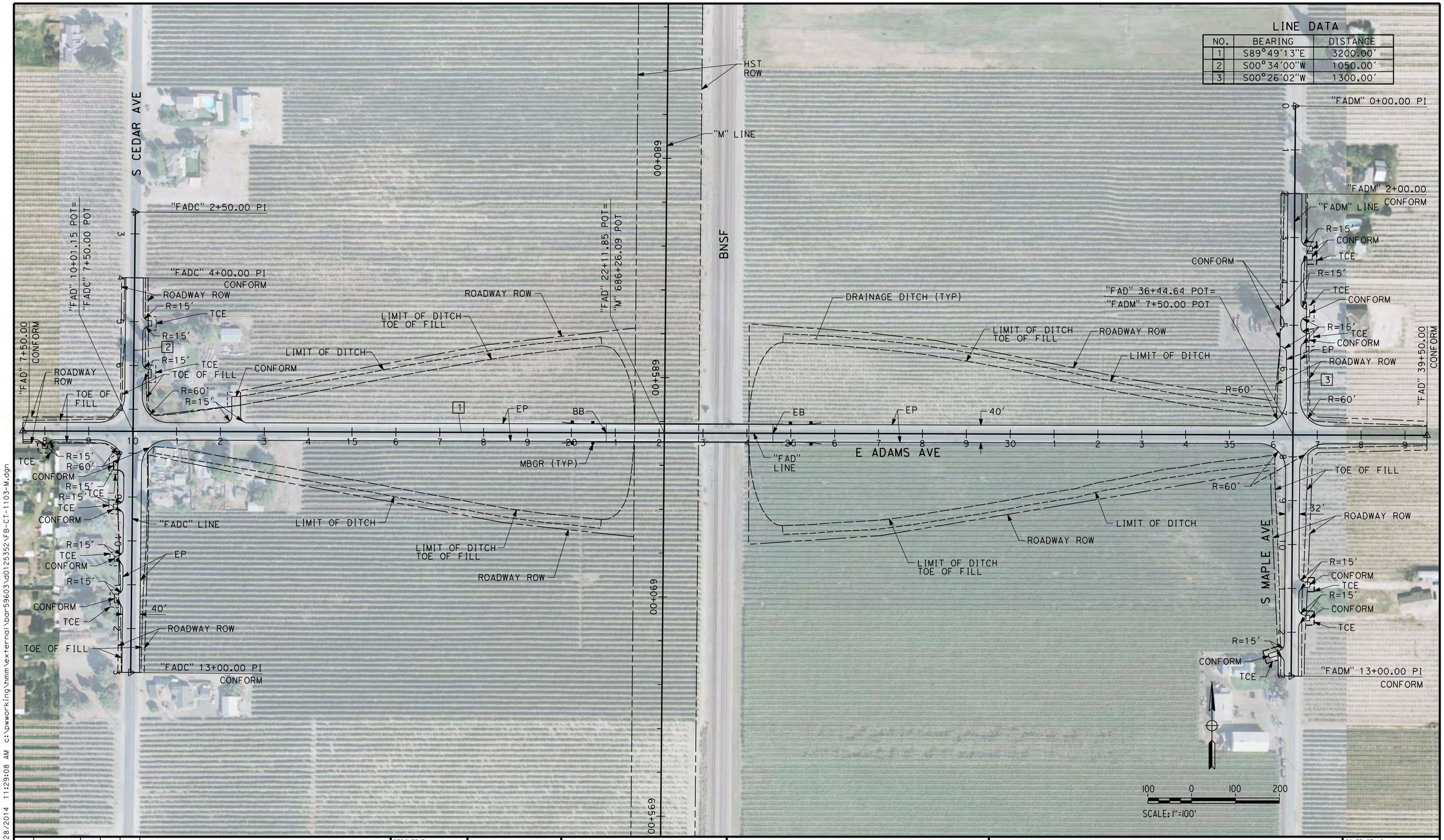

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 03/28/14

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION LAYOUT
E ADAMS AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT1103
SCALE AS SHOWN
SHEET NO. 3 OF 32

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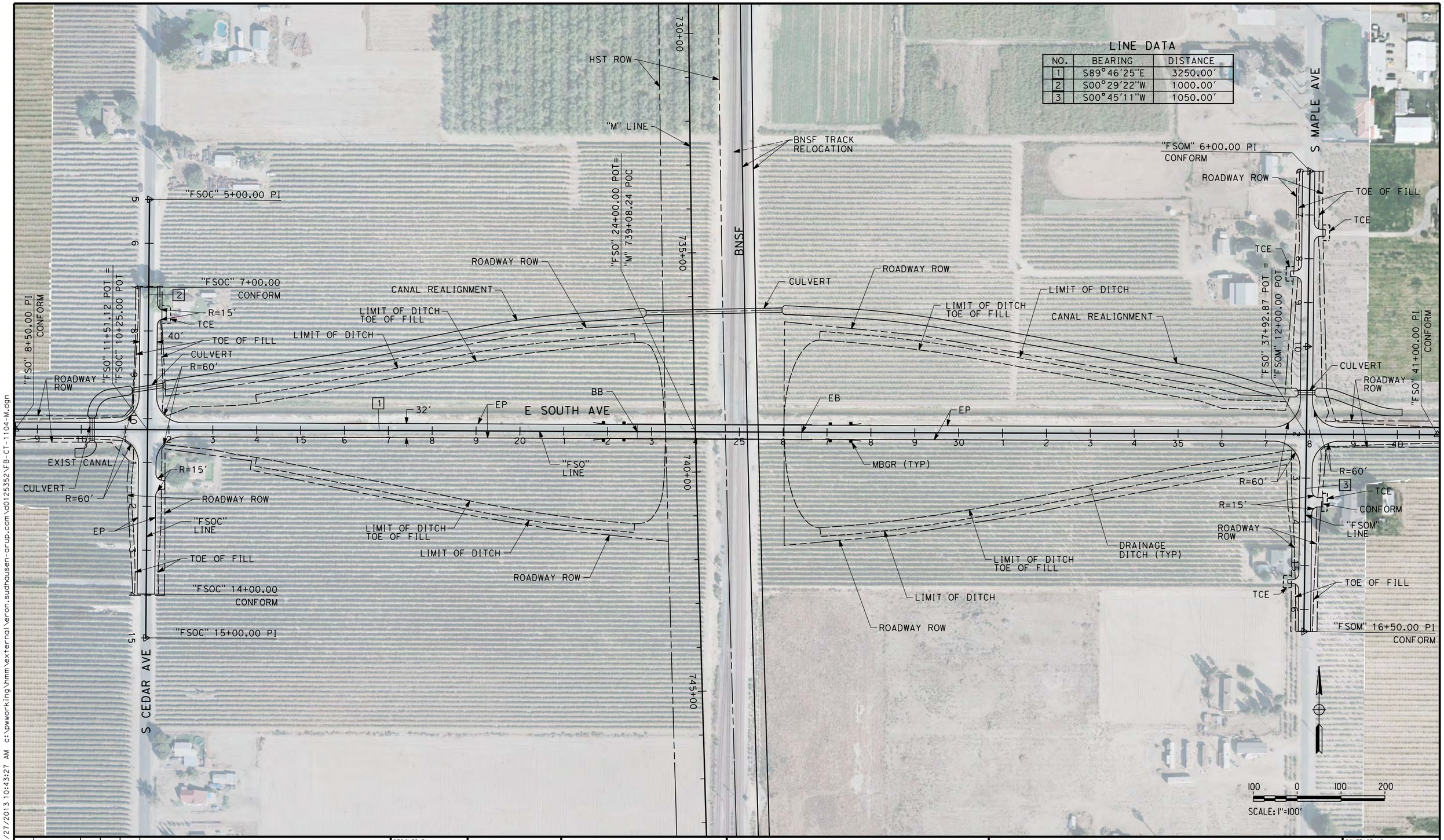
BAR59603



LINE DATA

NO.	BEARING	DISTANCE
1	S89°46'25"E	3250.00'
2	S00°29'22"W	1000.00'
3	S00°45'11"W	1050.00'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD

MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION LAYOUT
E SOUTH AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT1104
SCALE AS SHOWN
SHEET NO. 4 OF 32

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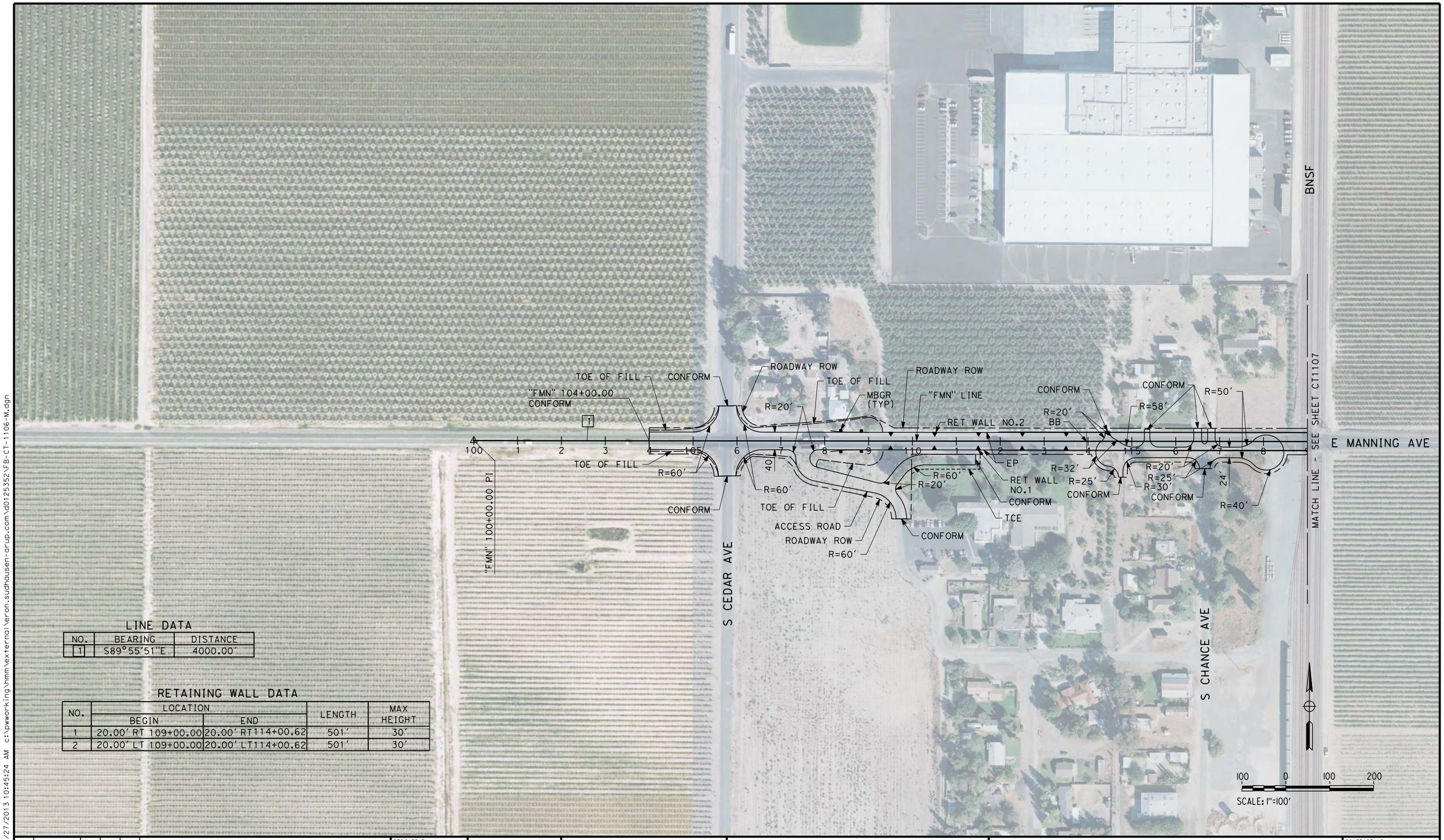

LINE DATA

NO.	BEARING	DISTANCE
1	S89°55'51"E	4000.00'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	20.00' RT 109+00.00	20.00' RT114+00.62	501'	30'
2	20.00' LT 109+00.00	20.00' LT114+00.62	501'	30'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION LAYOUT
E MANNING AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT1106
SCALE AS SHOWN
SHEET NO. 5 OF 32

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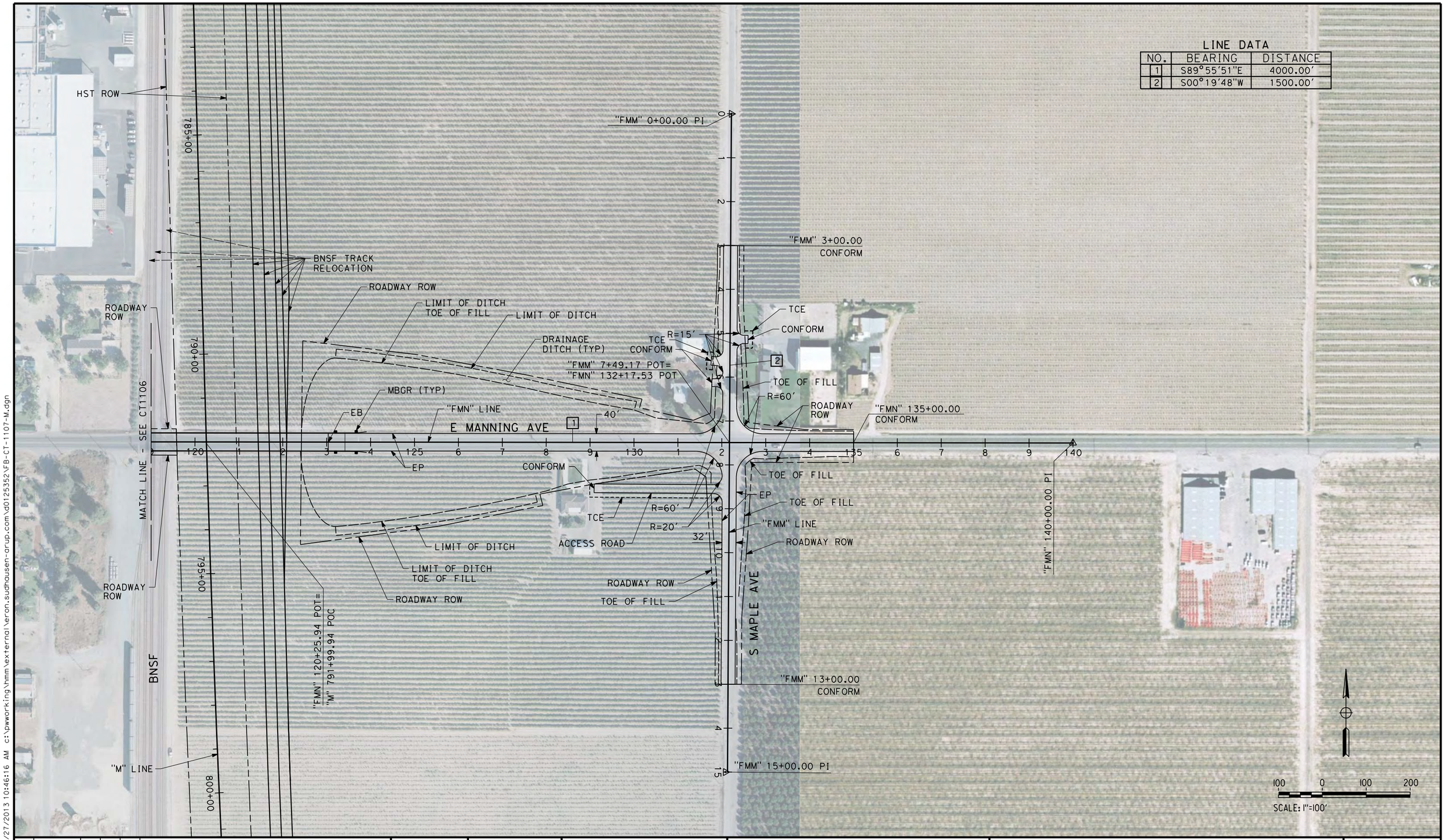

LINE DATA

NO.	BEARING	DISTANCE
1	S89°55'51"E	4000.00'
2	S00°19'48"W	1500.00'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION LAYOUT
E MANNING AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT1107
SCALE AS SHOWN
SHEET NO. 6 OF 32

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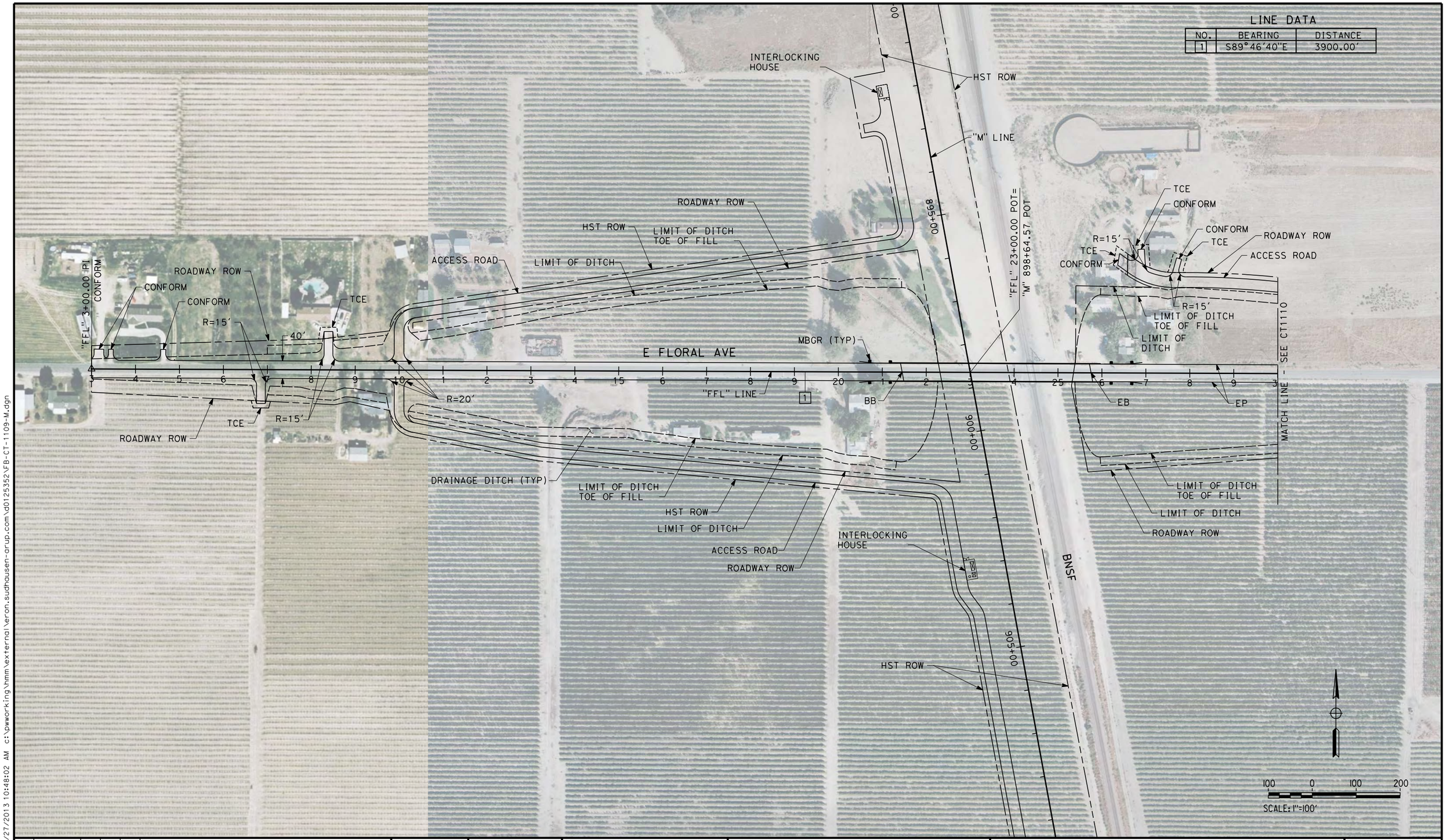

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION LAYOUT
E FLORAL AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT1109
SCALE AS SHOWN
SHEET NO. 7 OF 32

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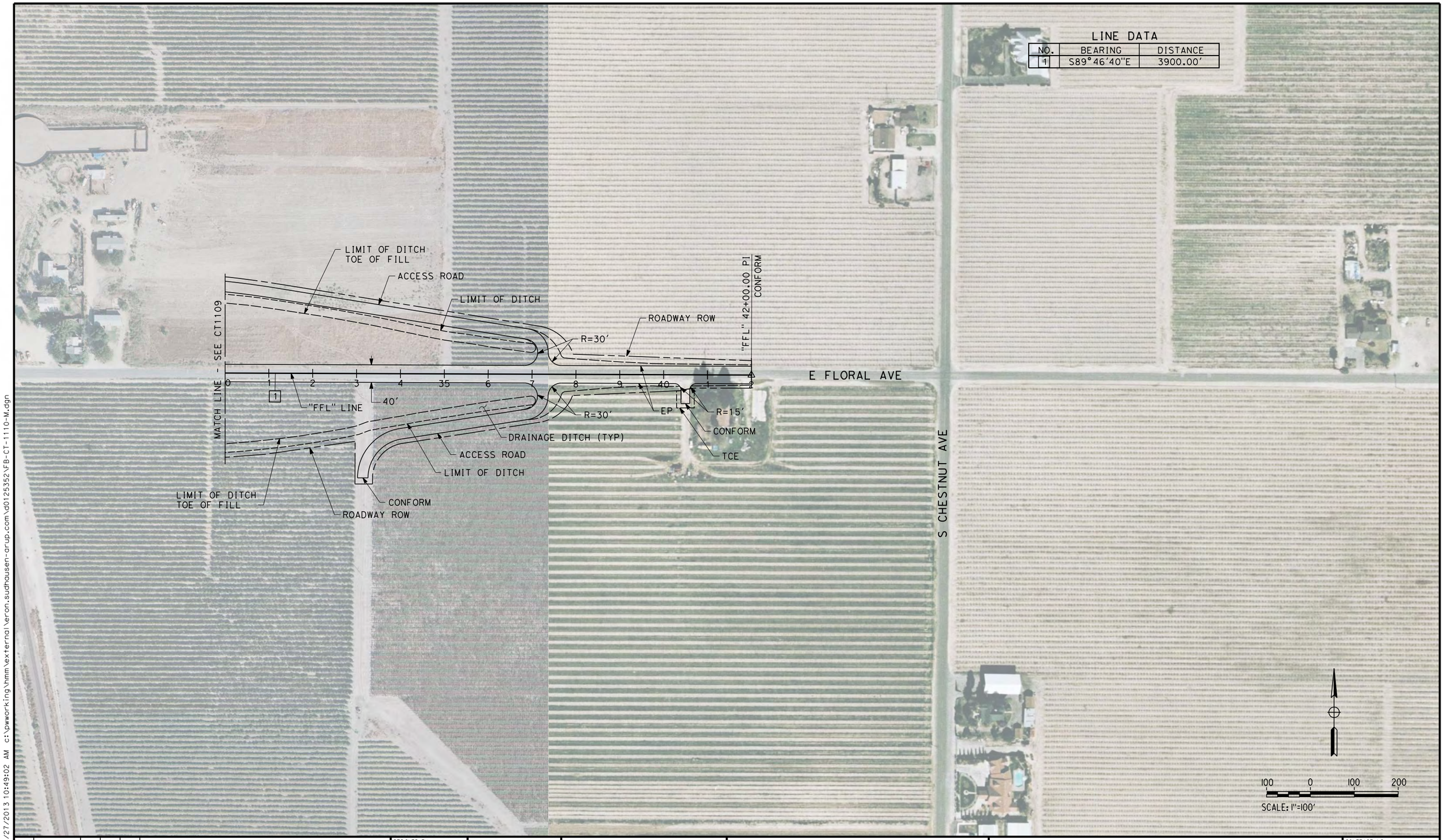

LINE DATA

NO.	BEARING	DISTANCE
1	S89°46'40"E	3900.00'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION LAYOUT
E FLORAL AVE

CONTRACT NO. HST 06-0003
DRAWING NO. CT1110
SCALE AS SHOWN
SHEET NO. 8 OF 32

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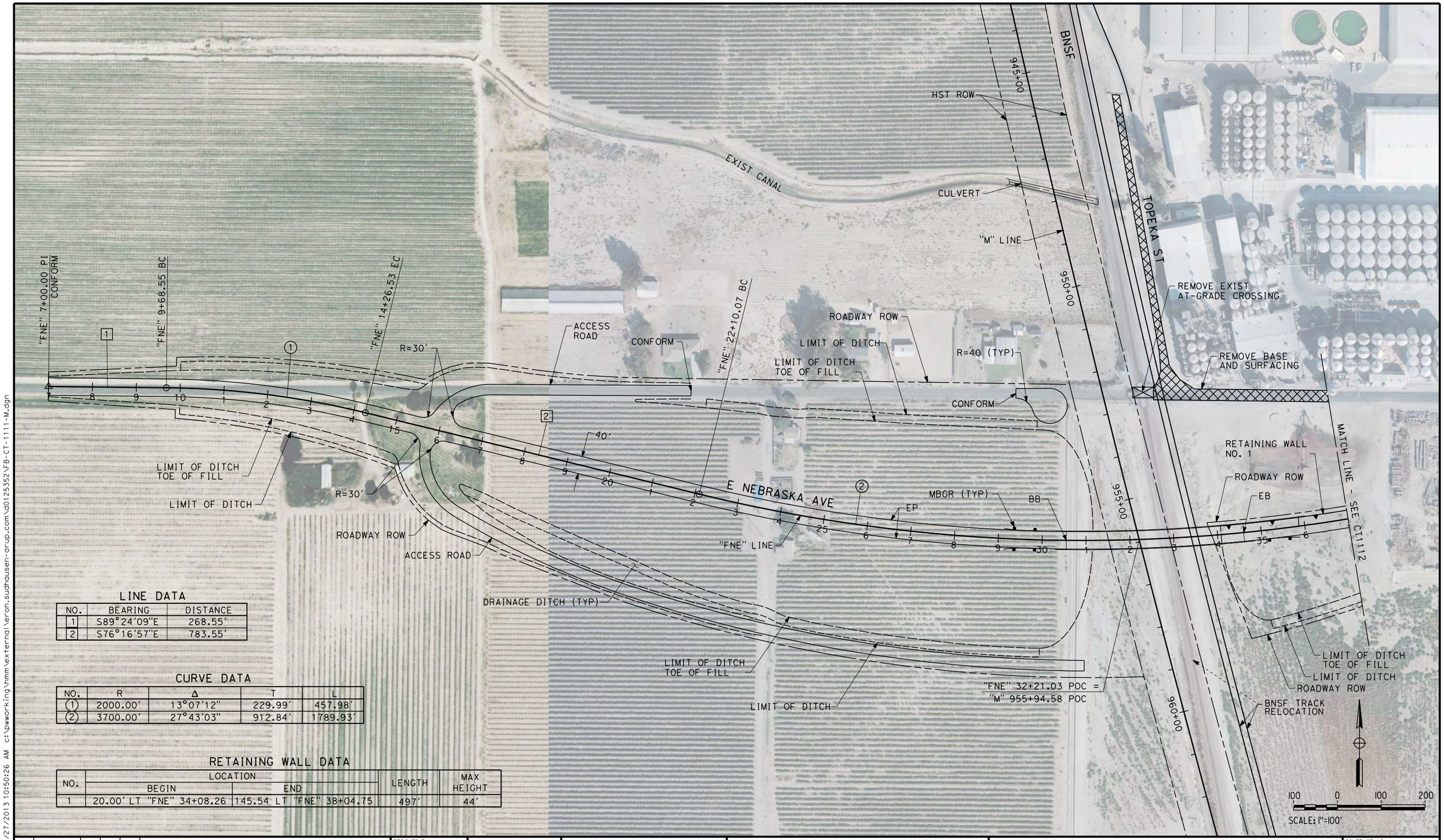

LINE DATA

NO.	BEARING	DISTANCE
1	S89°24'09"E	268.55'
2	S76°16'57"E	783.55'

CURVE DATA

NO.	R	Δ	T	L
1	2000.00'	13°07'12"	229.99'	457.98'
2	3700.00'	27°43'03"	912.84'	1789.93'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	20.00' LT "FNE" 34+08.26	145.54 LT "FNE" 38+04.75	497'	44'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION LAYOUT
E NEBRASKA AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT1111
SCALE AS SHOWN
SHEET NO. 9 OF 32

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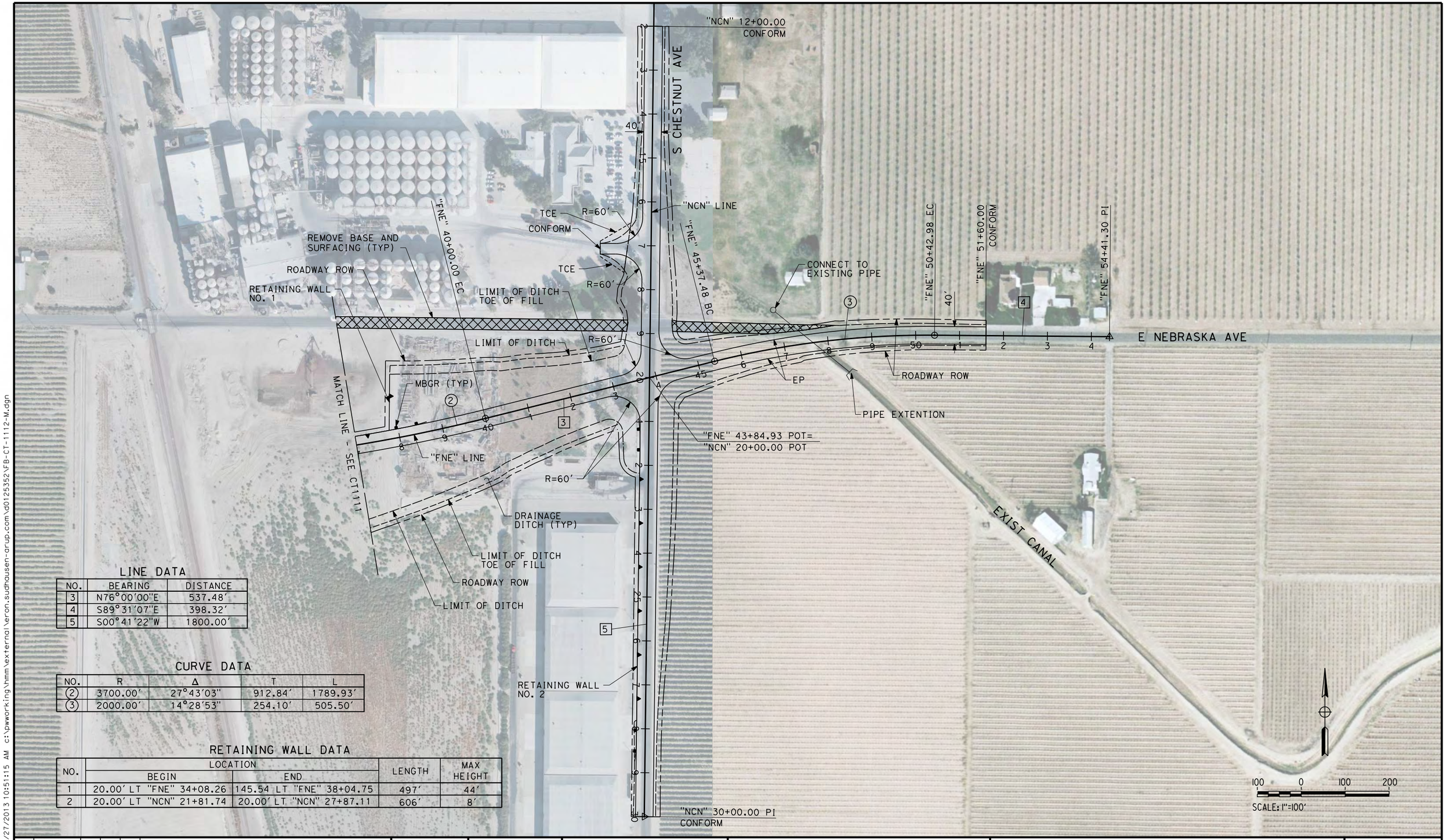

LINE DATA

NO.	BEARING	DISTANCE
3	N76°00'00"E	537.48'
4	S89°31'07"E	398.32'
5	S00°41'22"W	1800.00'

CURVE DATA

NO.	R	Δ	T	L
2	3700.00'	27°43'03"	912.84'	1789.93'
3	2000.00'	14°28'53"	254.10'	505.50'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	20.00' LT "FNE" 34+08.26	145.54 LT "FNE" 38+04.75	497'	44'
2	20.00' LT "NCN" 21+81.74	20.00' LT "NCN" 27+87.11	606'	8'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION LAYOUT
E NEBRASKA AVE

CONTRACT NO. HST 06-0003
DRAWING NO. CT1112
SCALE AS SHOWN
SHEET NO. 10 OF 32

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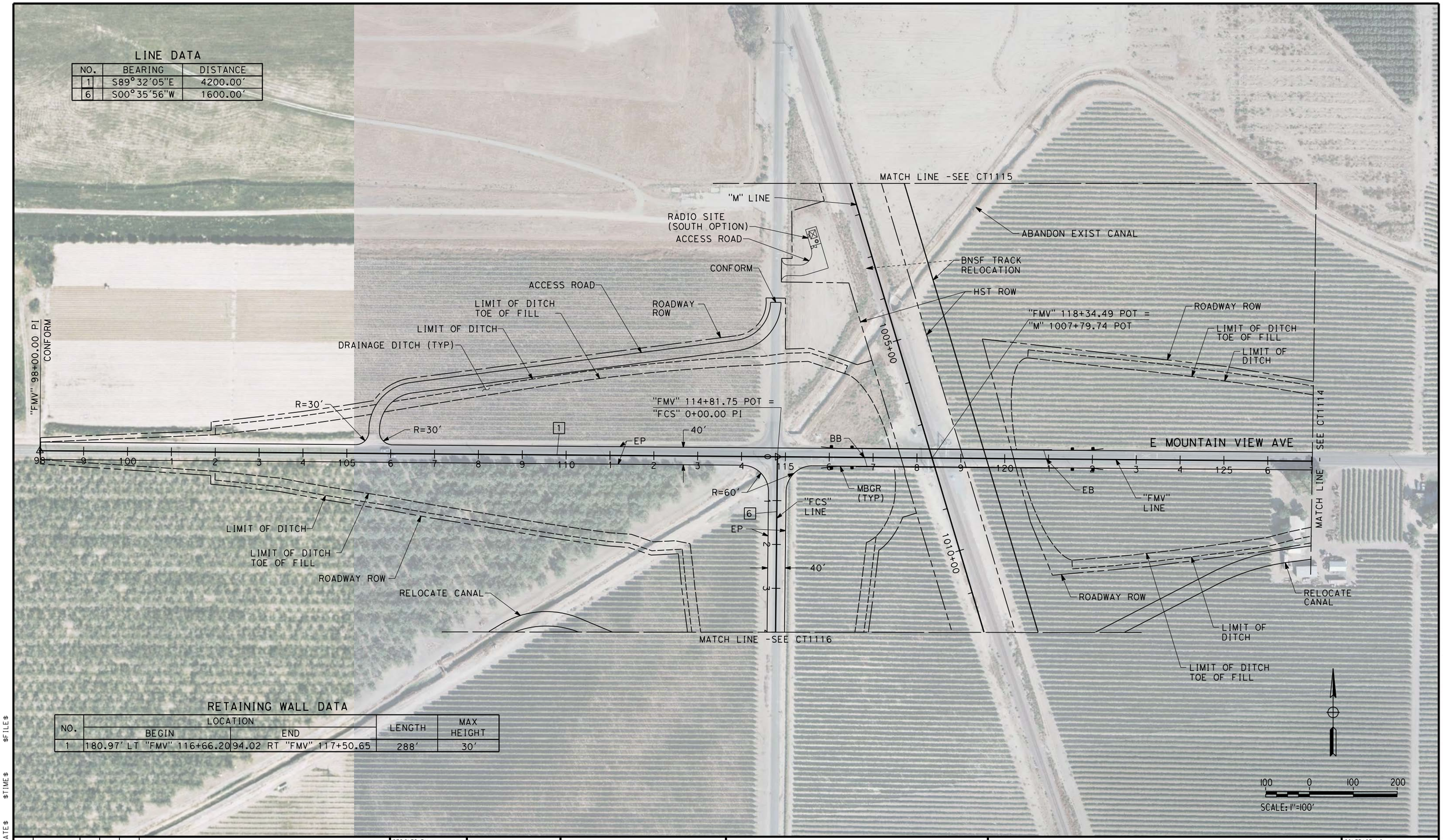
LINE DATA

NO.	BEARING	DISTANCE
1	S89°32'05"E	4200.00'
6	S00°35'56"W	1600.00'



RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	180.97' LT "FMV" 116+66.20	94.02 RT "FMV" 117+50.65	288'	30'

$FILE$
$TIME$
$DATE$
$USER$

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

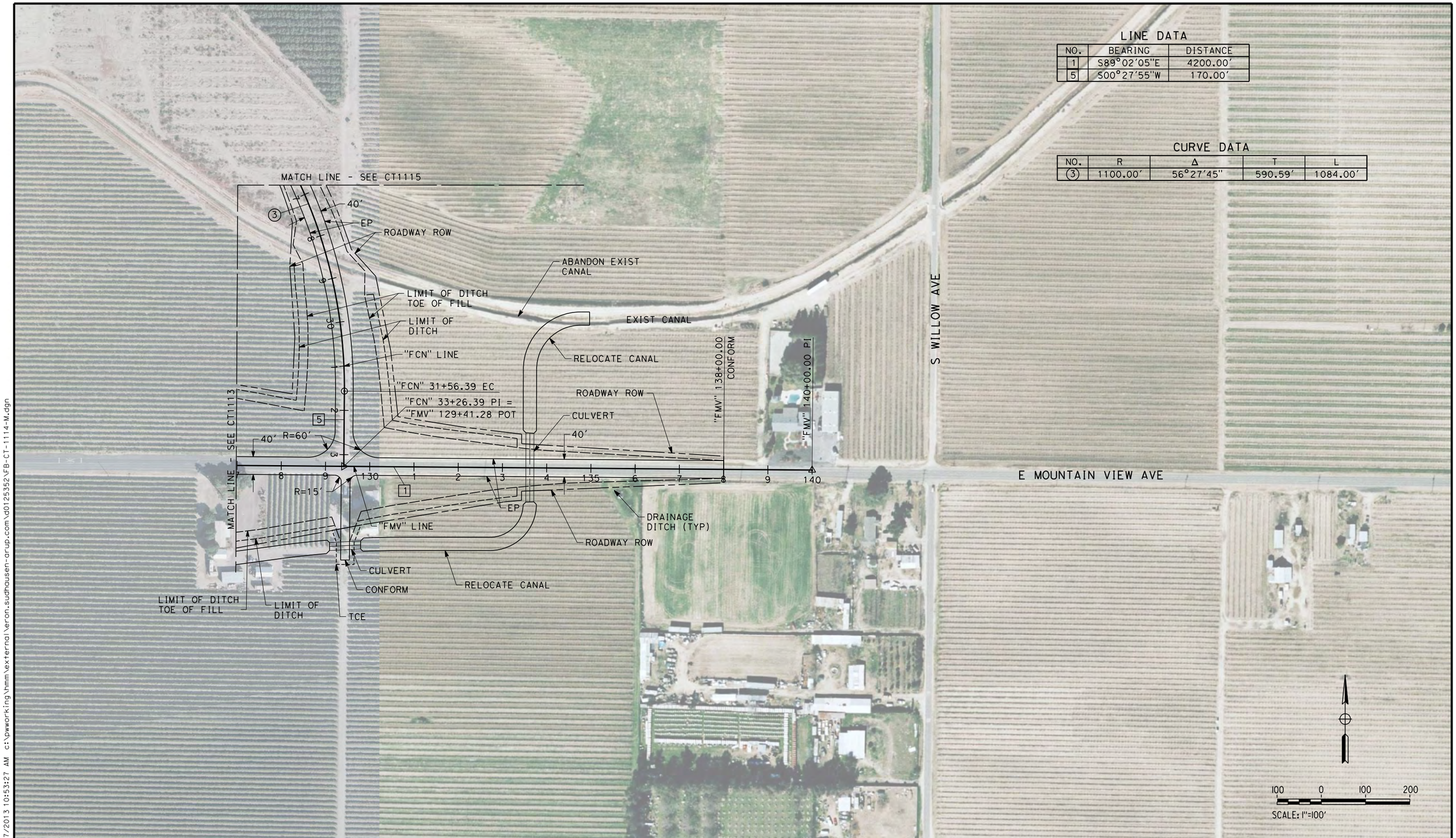
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD

MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION LAYOUT
E MOUNTAIN VIEW AVE

CONTRACT NO. HST 06-0003
DRAWING NO. CT1113
SCALE AS SHOWN
SHEET NO. 11 OF 32



LINE DATA

NO.	BEARING	DISTANCE
1	S89°02'05"E	4200.00'
5	S00°27'55"W	170.00'

CURVE DATA

NO.	R	Δ	T	L
3	1100.00'	56°27'45"	590.59'	1084.00'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION LAYOUT
E MOUNTAIN VIEW AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT1114
SCALE AS SHOWN
SHEET NO. 12 OF 32

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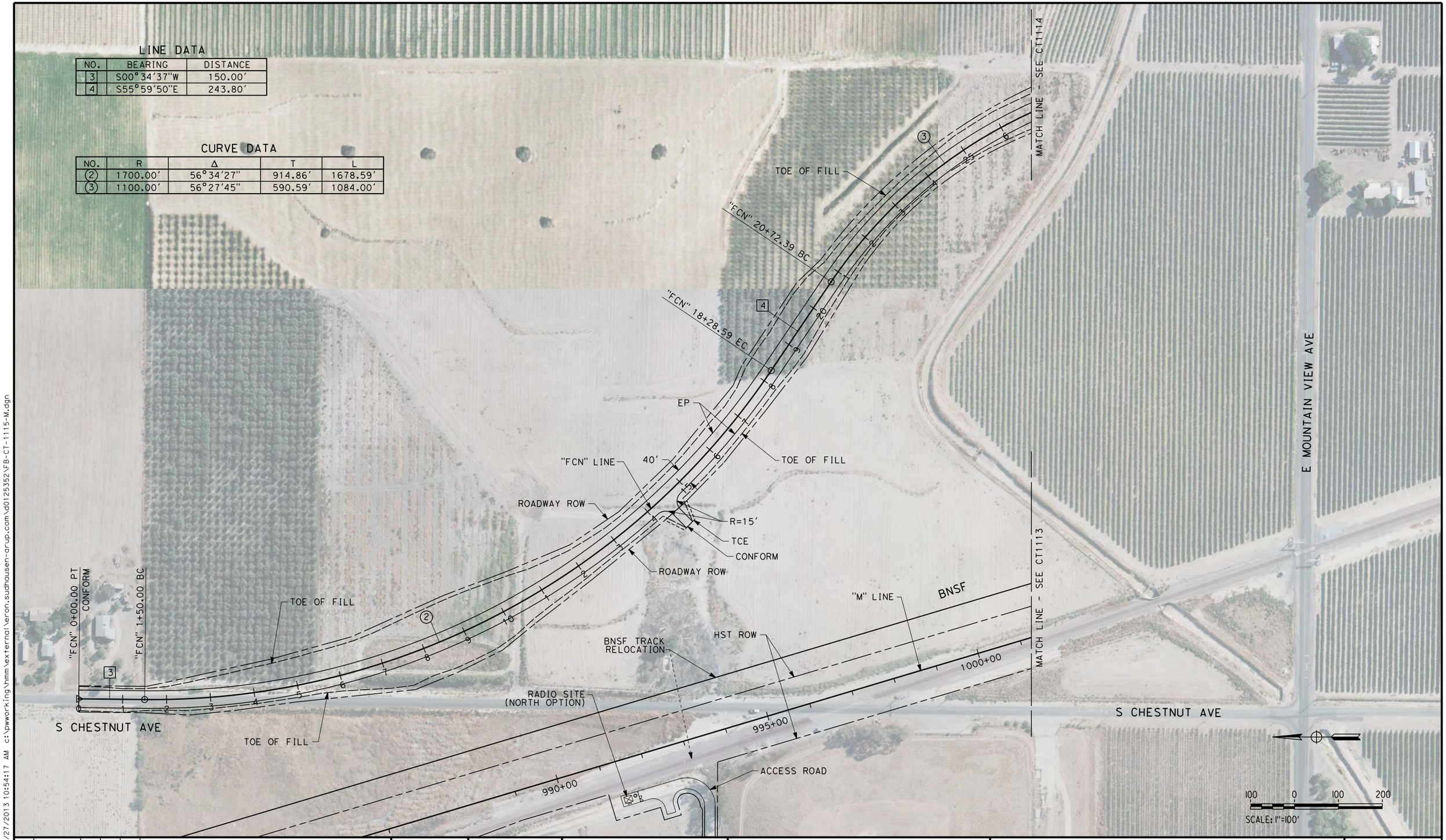
LINE DATA

NO.	BEARING	DISTANCE
3	S00°34'37"W	150.00'
4	S55°59'50"E	243.80'

CURVE DATA

NO.	R	Δ	T	L
2	1700.00'	56°34'27"	914.86'	1678.59'
3	1100.00'	56°27'45"	590.59'	1084.00'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
ROADWAY LAYOUT
S CHESTNUT AVE (NORTH)

CONTRACT NO. HSR 06-0003
DRAWING NO. CT1115
SCALE AS SHOWN
SHEET NO. 13 OF 32

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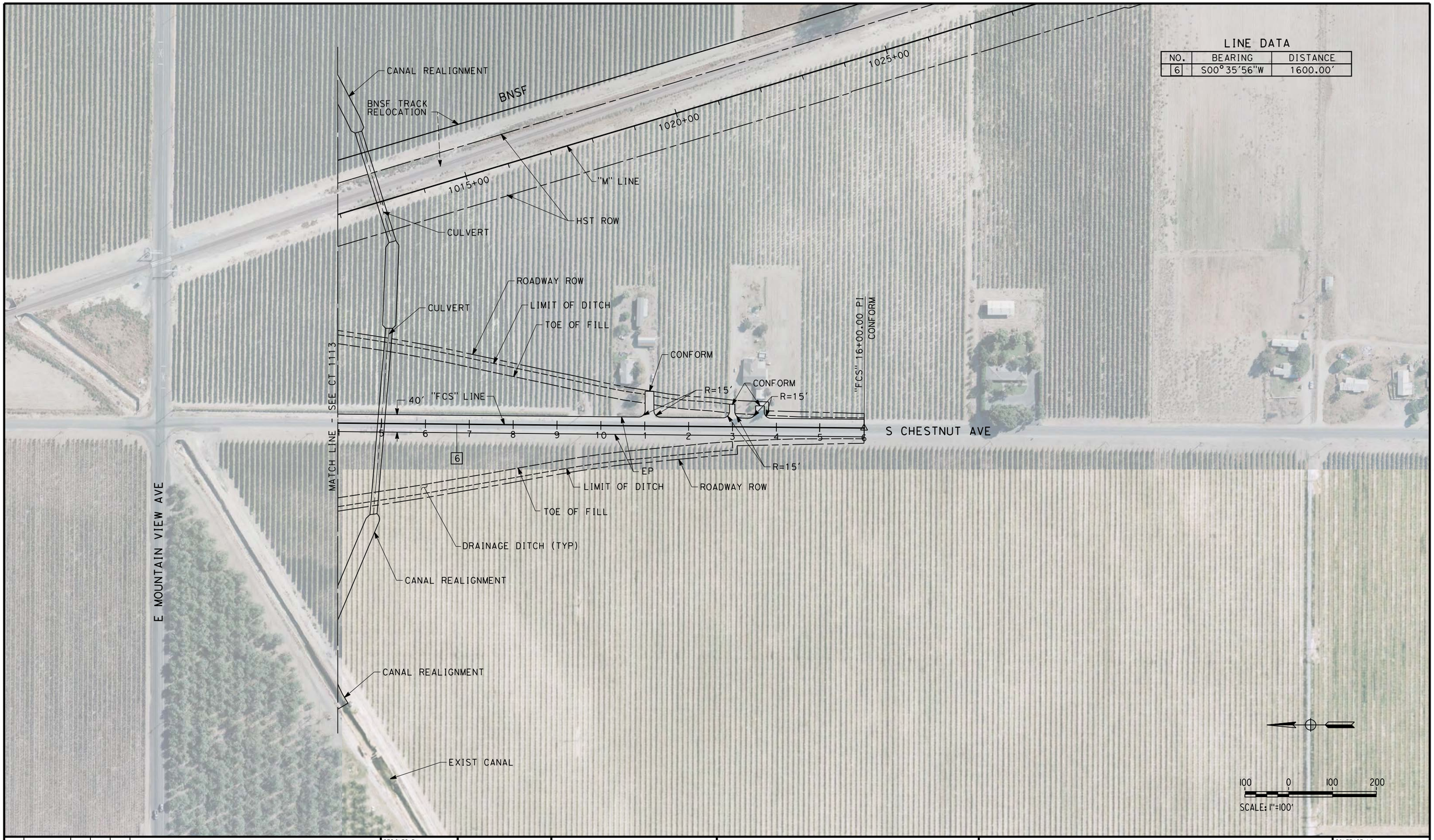

LINE DATA

NO.	BEARING	DISTANCE
6	S00°35'56"W	1600.00'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
ROADWAY LAYOUT
S CHESTNUT AVE (SOUTH)

CONTRACT NO. HSR 06-0003
DRAWING NO. CT1116
SCALE AS SHOWN
SHEET NO. 14 OF 32

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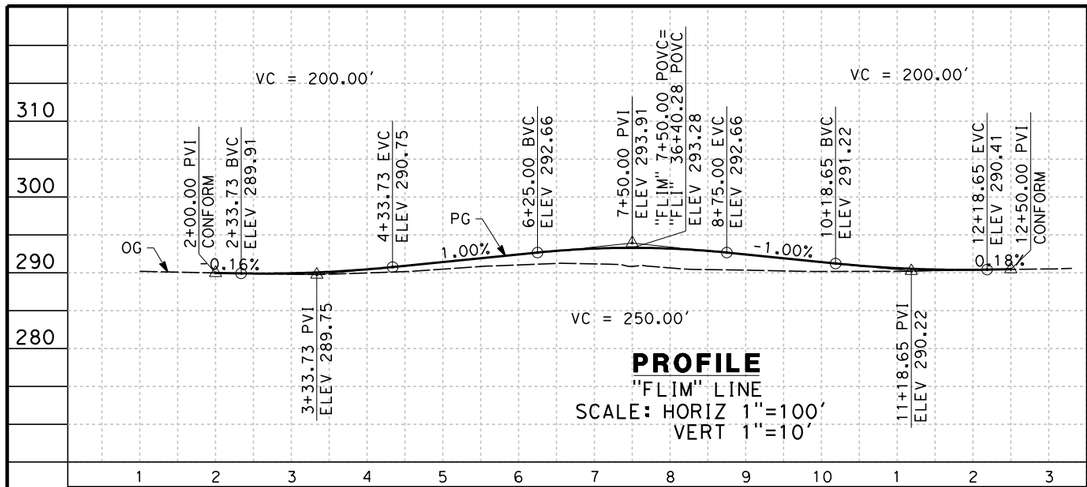
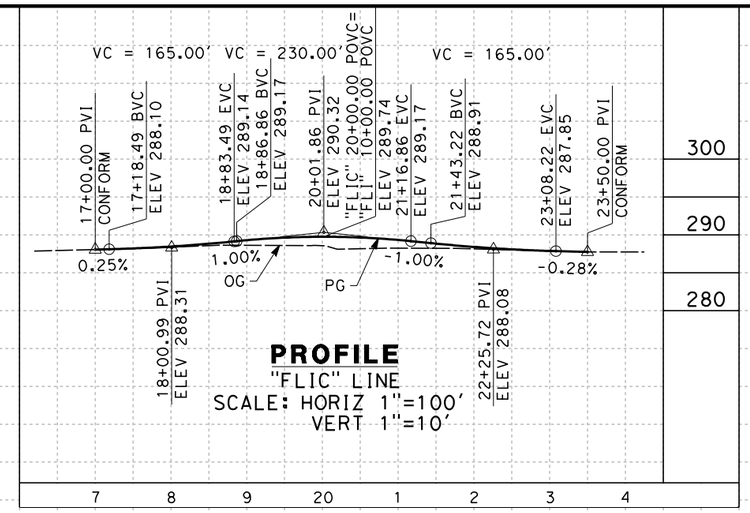
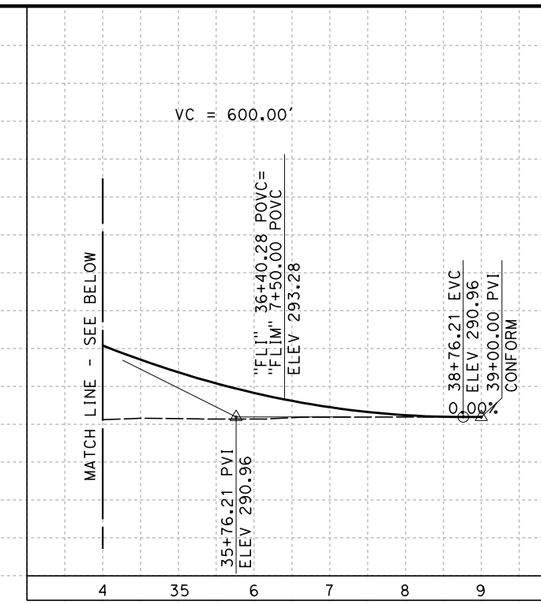
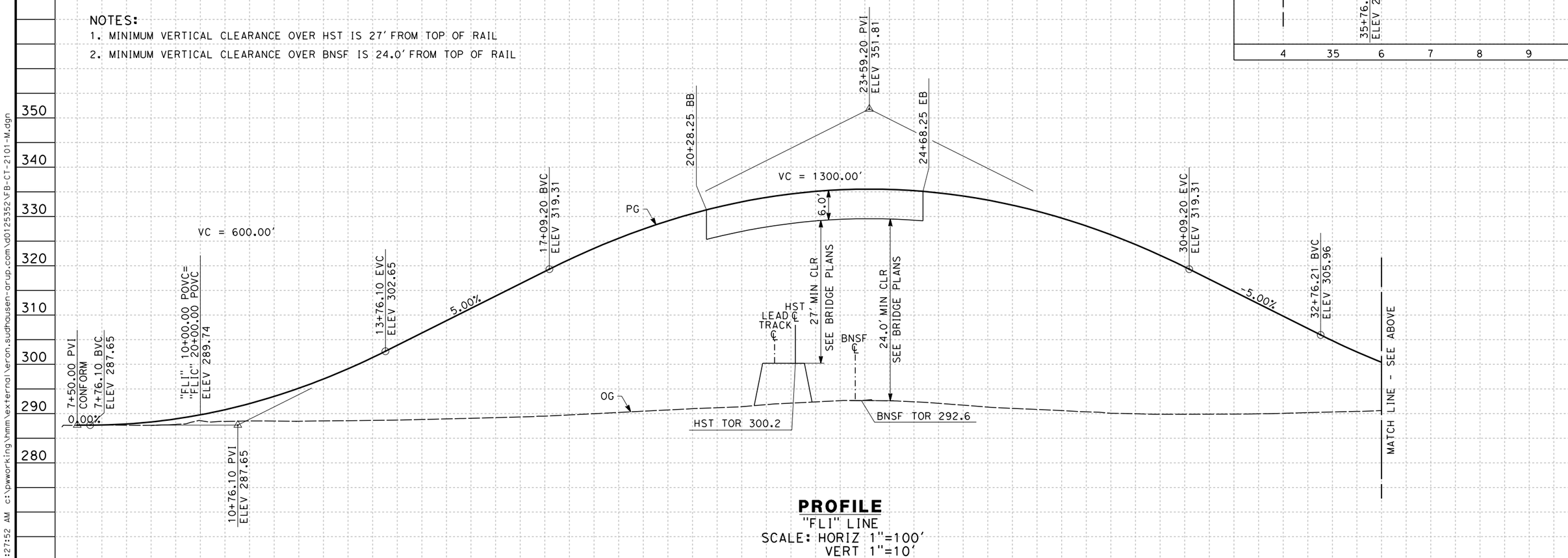






NOTES:

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER BNSF IS 24.0' FROM TOP OF RAIL



STATION	8	9	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	TOTAL
CY Exc																												
CY Emb																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION PROFILE
E LINCOLN AVE AND S MAPLE AT E LINCOLN AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2101
SCALE AS SHOWN
SHEET NO. 15 OF 32

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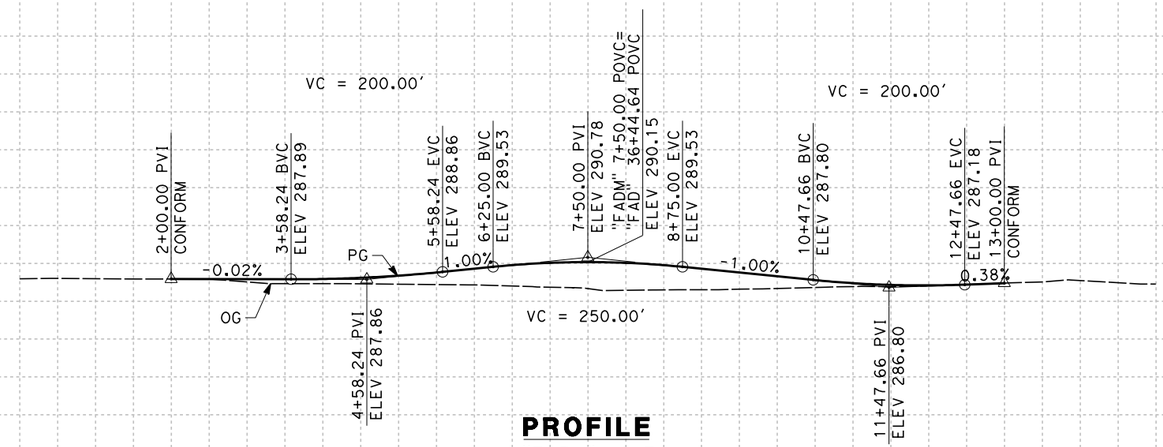
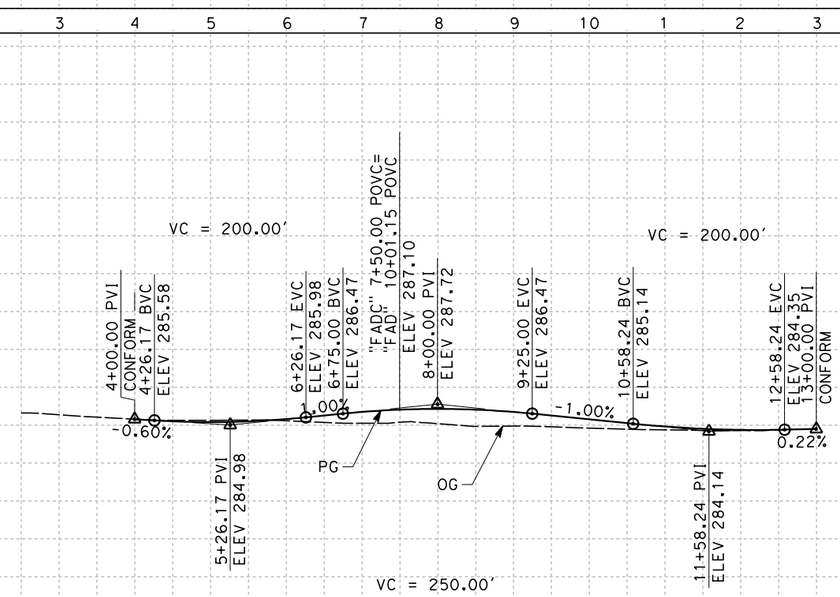


PROFILE

"FADM" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'



PROFILE

"FADC" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION		0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	2	3	4	5	6	7	8	9	10	1	2	3	TOTAL
CY	Exc																													
	Emb																													

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

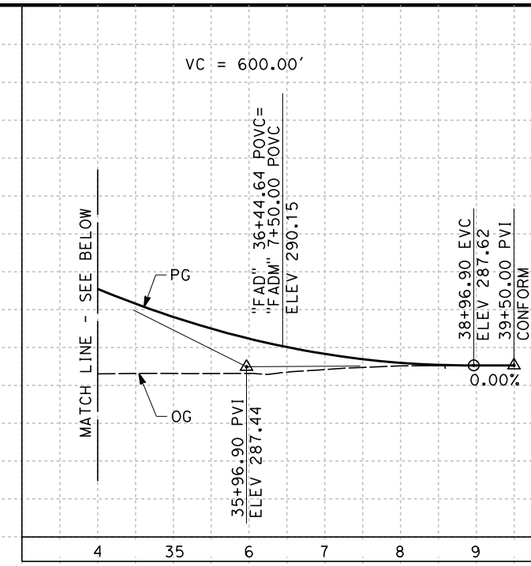
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
ROADWAY PROFILE
S CEDAR AND S MAPLE AT E ADAMS AVE

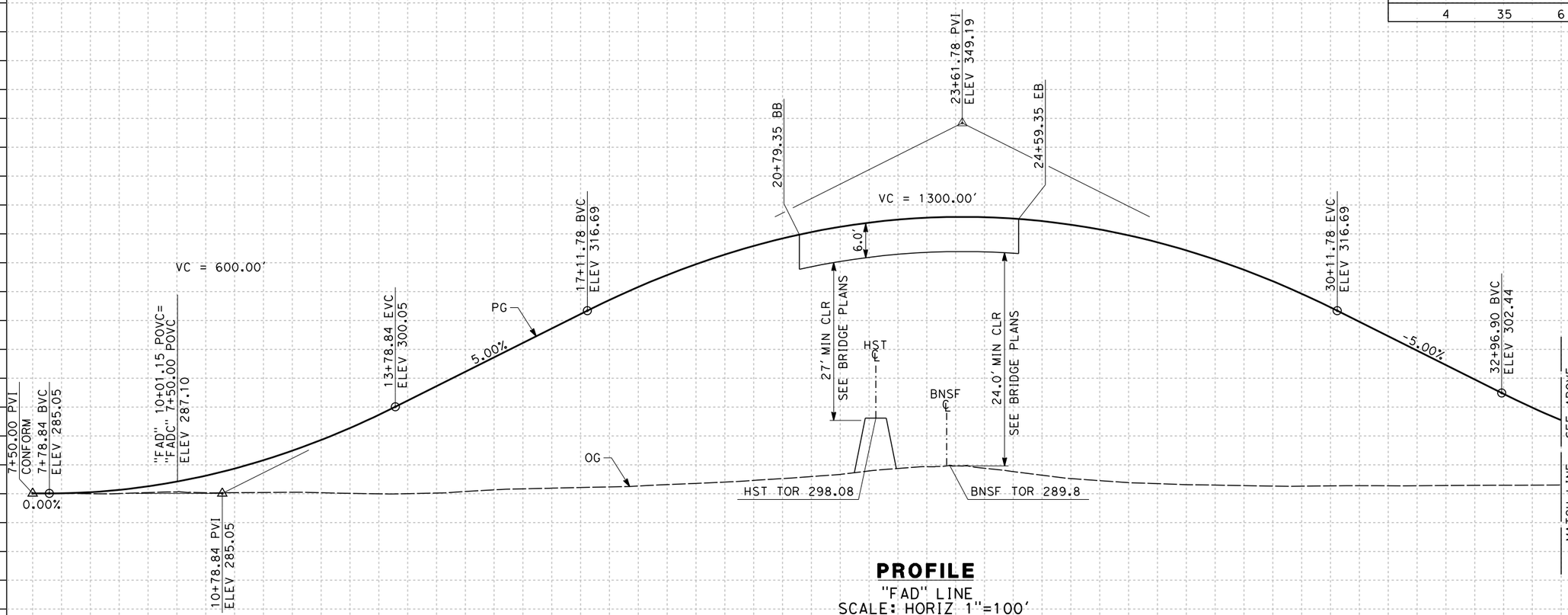
CONTRACT NO. HSR 06-0003
DRAWING NO. CT2102
SCALE AS SHOWN
SHEET NO. 16 OF 32

eron.sudhausen 12/27/2013 3:09:15 PM c:\pwworking\hmm\external\eron.sudhausen-arup.com\d0125352\FB-CT-2102-M.dgn

NOTES:

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER BNSF IS 24.0' FROM TOP OF RAIL





PROFILE

"FAD" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION	8	9	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	TOTAL
CY Exc																												
CY Emb																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION PROFILE
E ADAMS AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2103
SCALE AS SHOWN
SHEET NO. 17 OF 32

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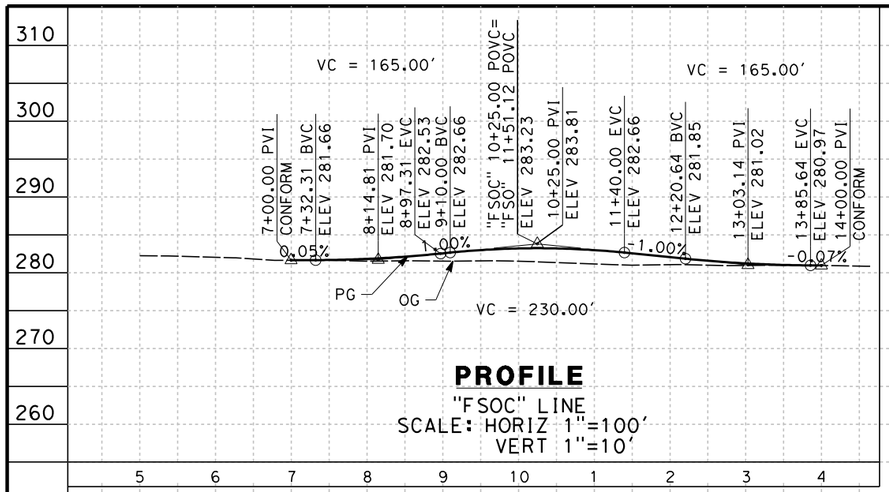
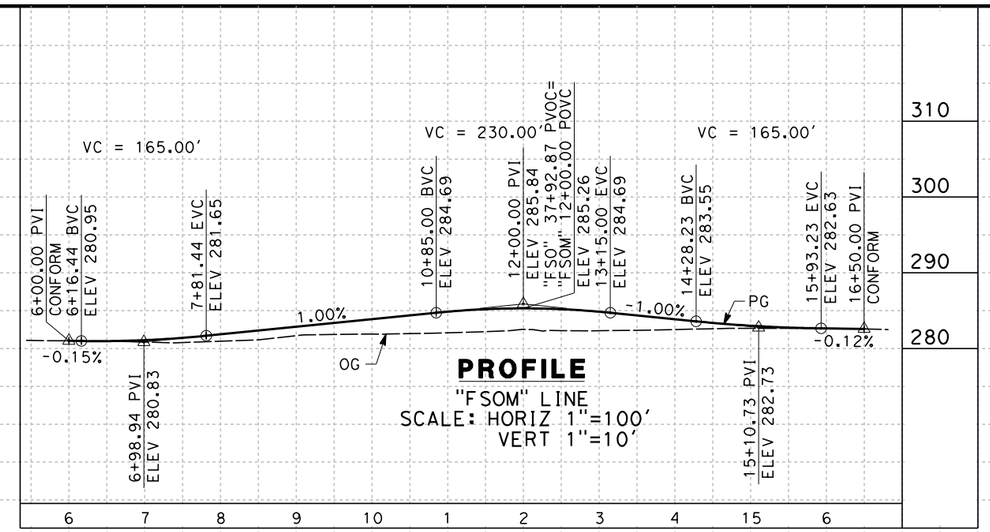
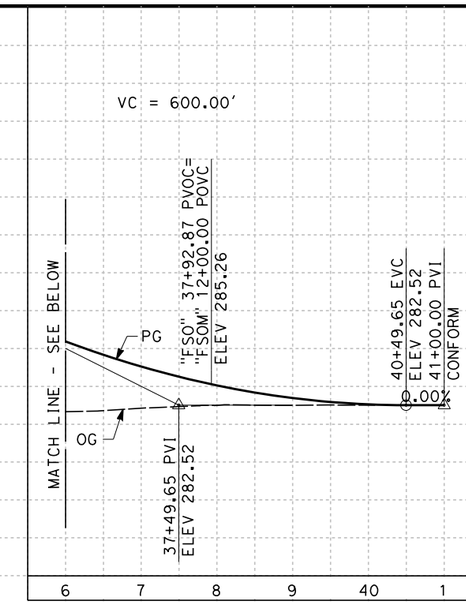
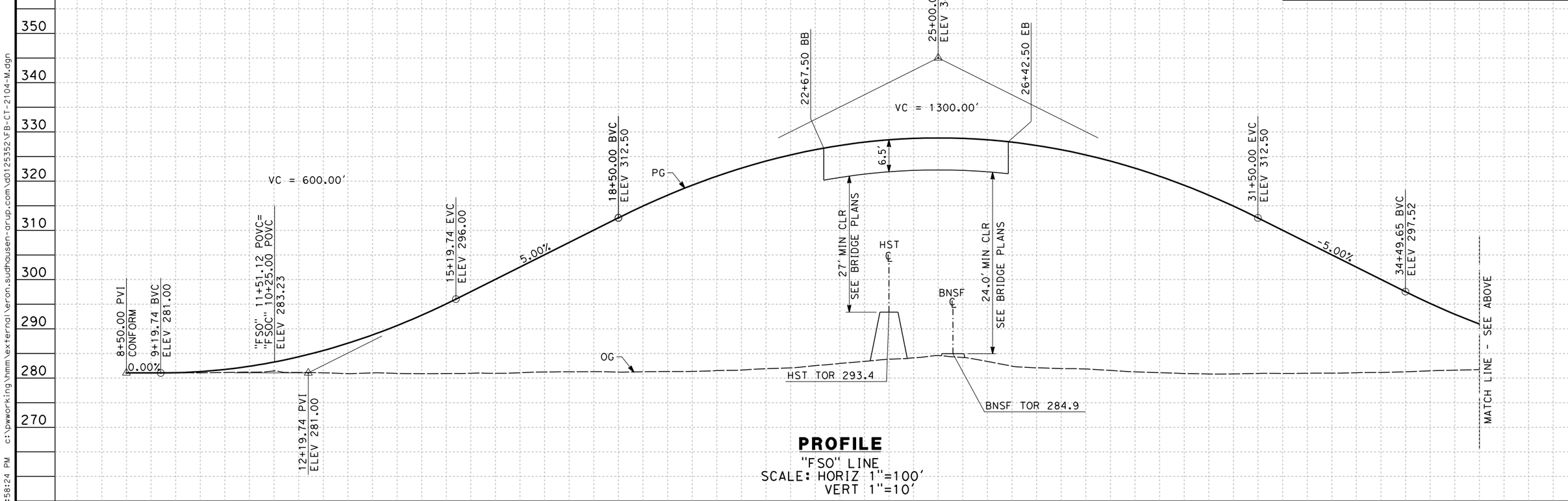






NOTES:

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER BNSF IS 24.0' FROM TOP OF RAIL



STATION		8	9	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	TOTAL
CY	Exc																														
	Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION PROFILE
E SOUTH AVE AND S CEDAR AT E SOUTH AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2104
SCALE AS SHOWN
SHEET NO. 18 OF 32

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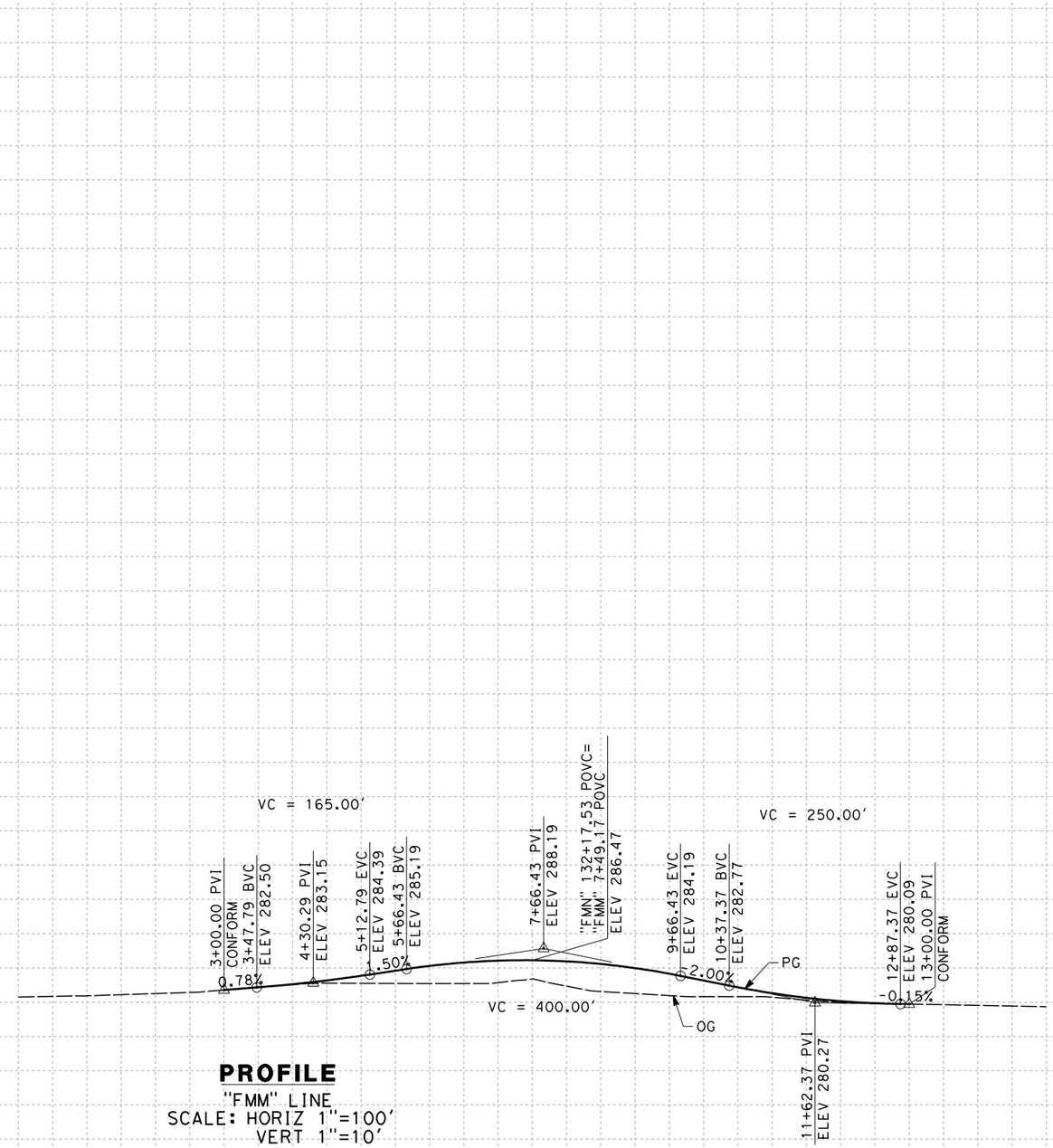

PROFILE

"FMM" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION	0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	15	TOTAL
CY Exc																	
CY Emb																	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
ROADWAY PROFILE
S MAPLE AT E MANNING AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2105
SCALE AS SHOWN
SHEET NO. 19 OF 32

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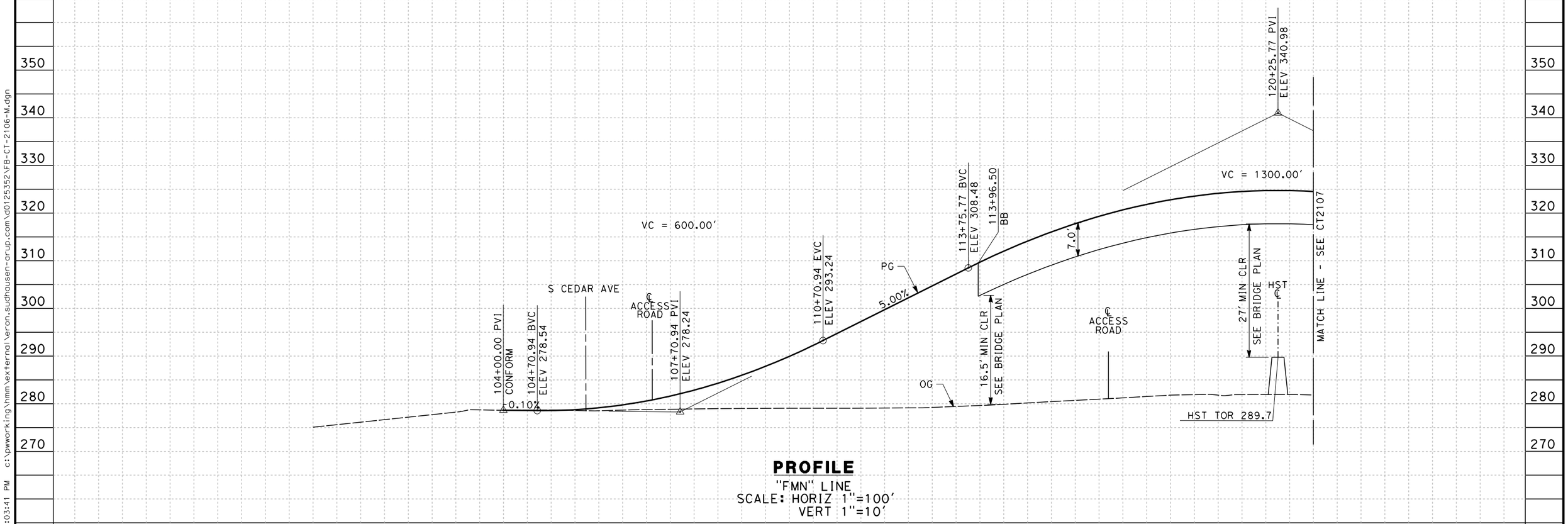
NOTES:

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER BNSF IS 24.0' FROM TOP OF RAIL
3. MINIMUM VERTICAL CLEARANCE OVER LOCAL STREET IS 16.5' FROM ROAD SURFACE



PROFILE

"FMN" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION		100	1	2	3	4	105	6	7	8	9	110	1	2	3	4	115	6	7	8	9	120	1	TOTAL
CY	Exc																							
	Emb																							

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION PROFILE
E MANNING AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2106
SCALE AS SHOWN
SHEET NO. 20 OF 32

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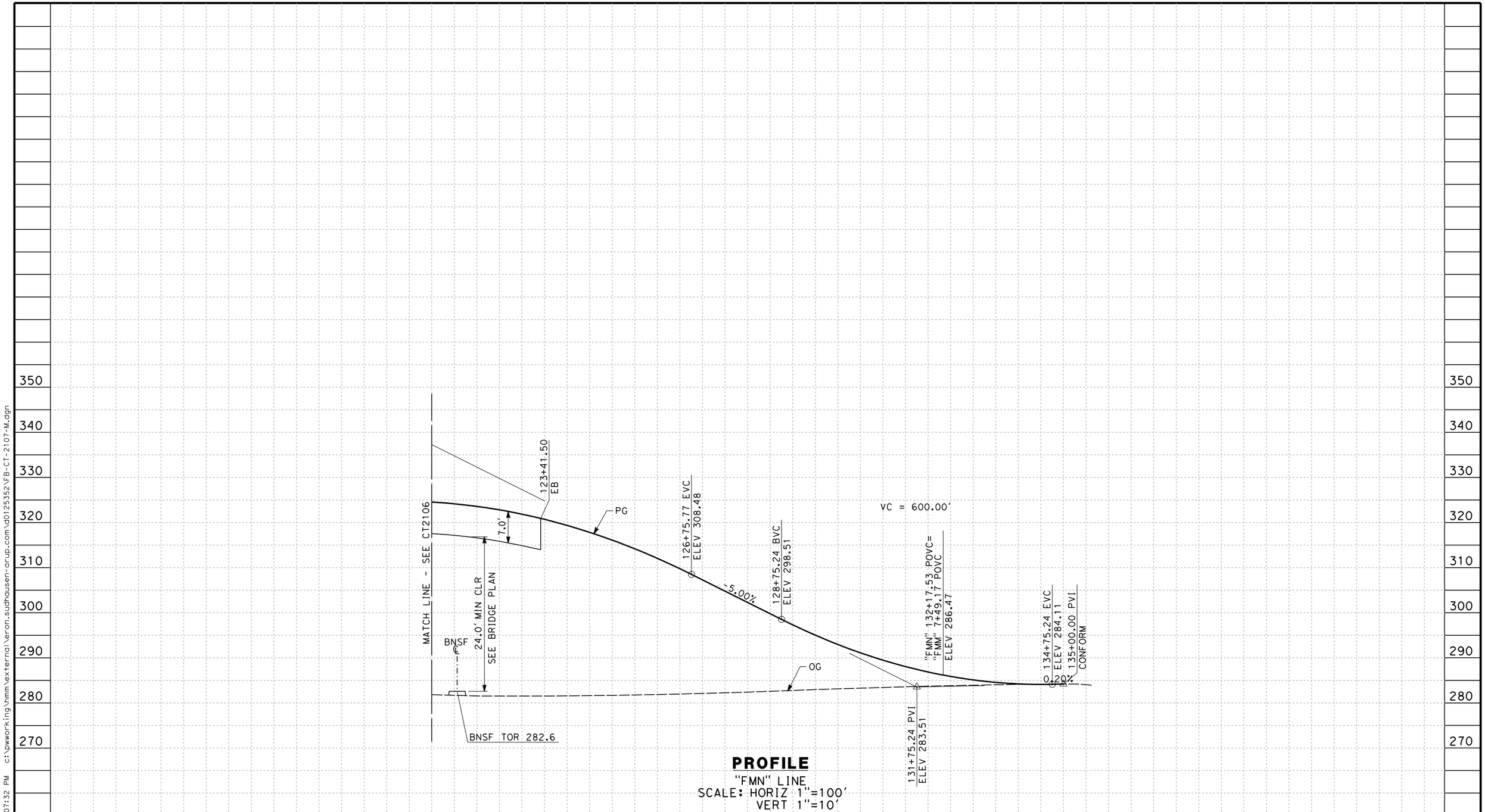

PROFILE

"FMN" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION PROFILE
E MANNING AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2107
SCALE AS SHOWN
SHEET NO. 21 OF 32

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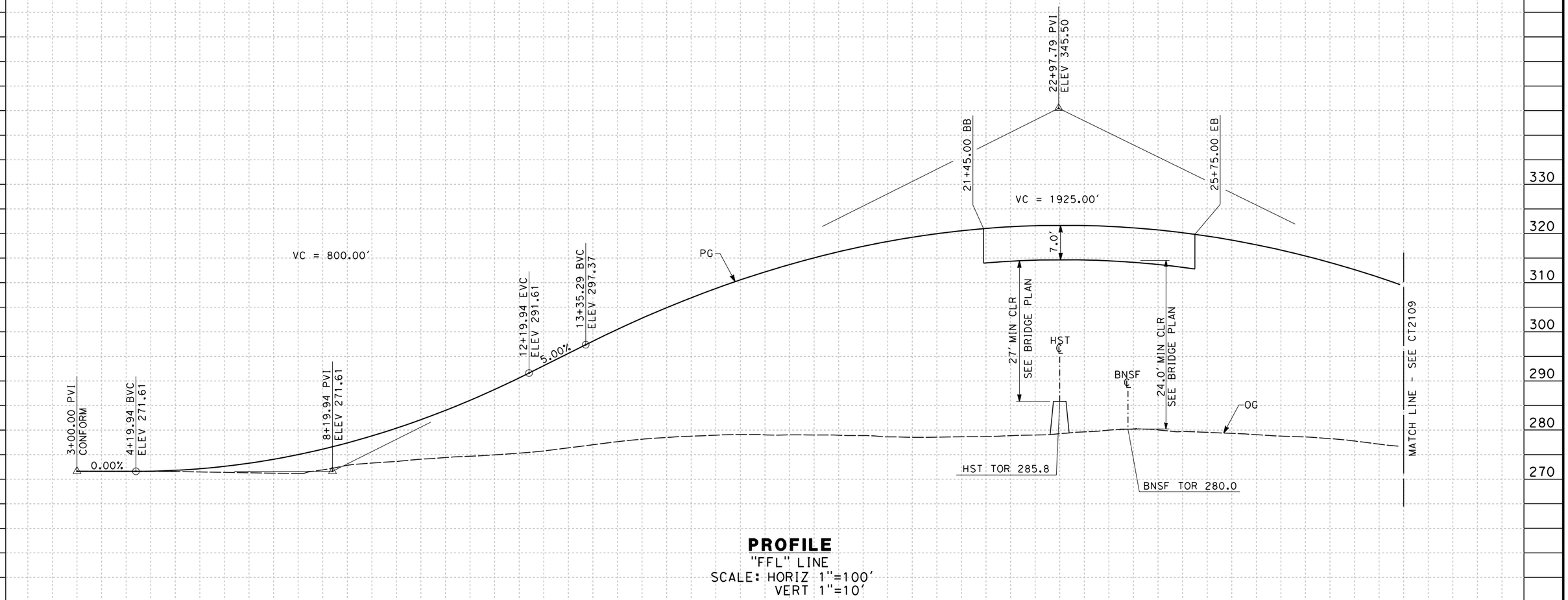
NOTES:

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER BNSF IS 24.0' FROM TOP OF RAIL



PROFILE

"FFL" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION	3	4	5	6	7	8	9	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	TOTAL
CY Exc																													
CY Emb																													

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION PROFILE
E FLORAL AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2108
SCALE AS SHOWN
SHEET NO. 22 OF 32

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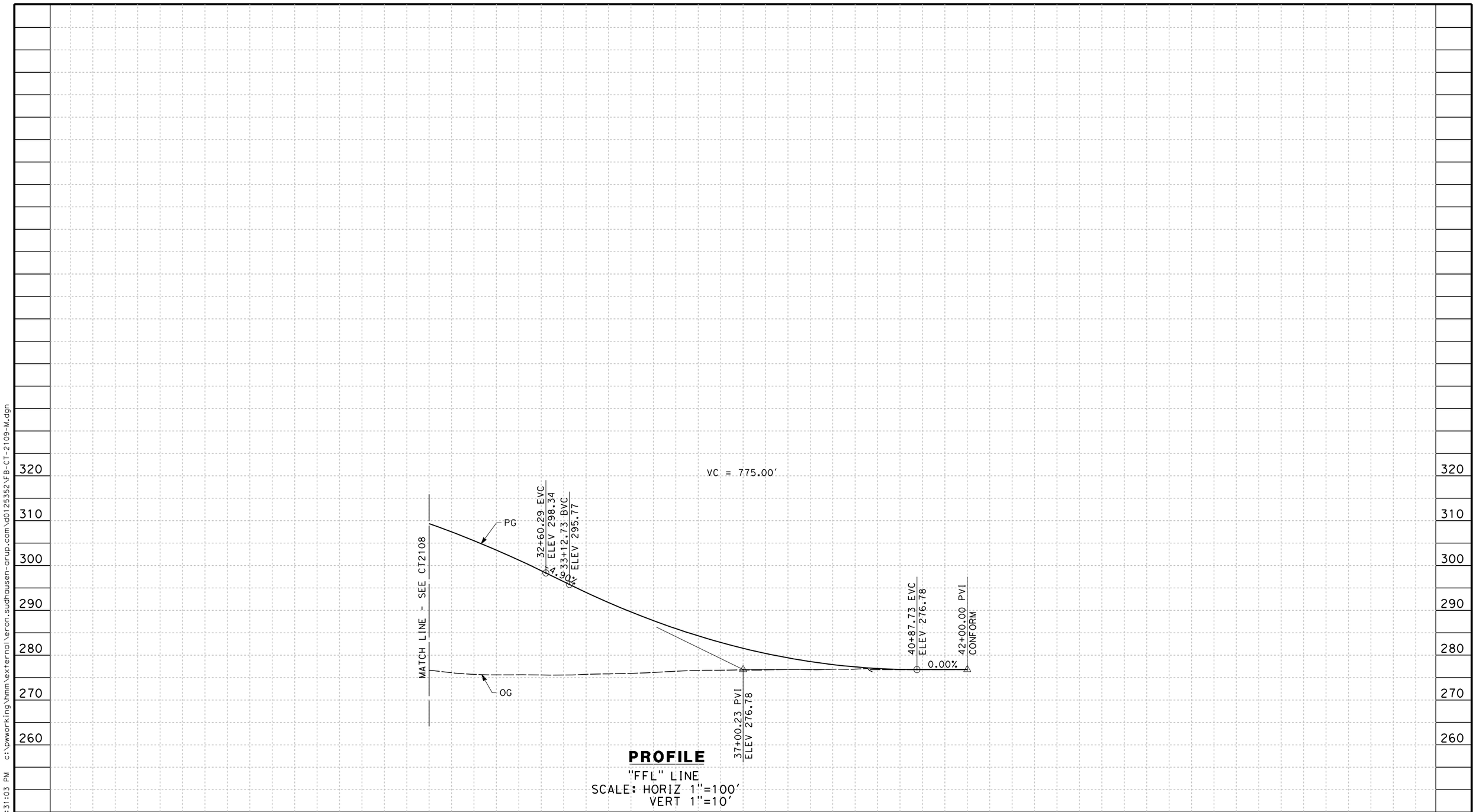

PROFILE

"FFL" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION PROFILE
E FLORAL AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2109
SCALE AS SHOWN
SHEET NO. 23 OF 32

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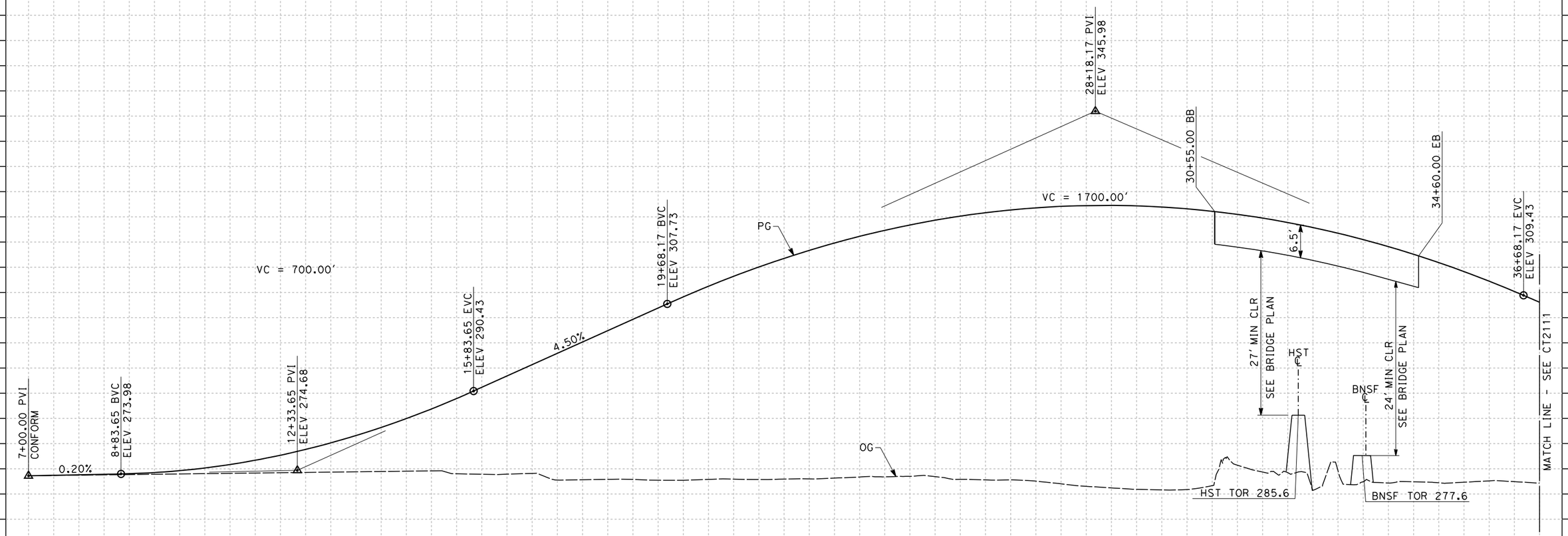
NOTES:

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER BNSF IS 24.0' FROM TOP OF RAIL



PROFILE

"FNE" LINE

SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION	7	8	9	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	TOTAL
CY Exc																																
CY Emb																																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION PROFILE
E NEBRASKA AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2110
SCALE AS SHOWN
SHEET NO. 24 OF 32

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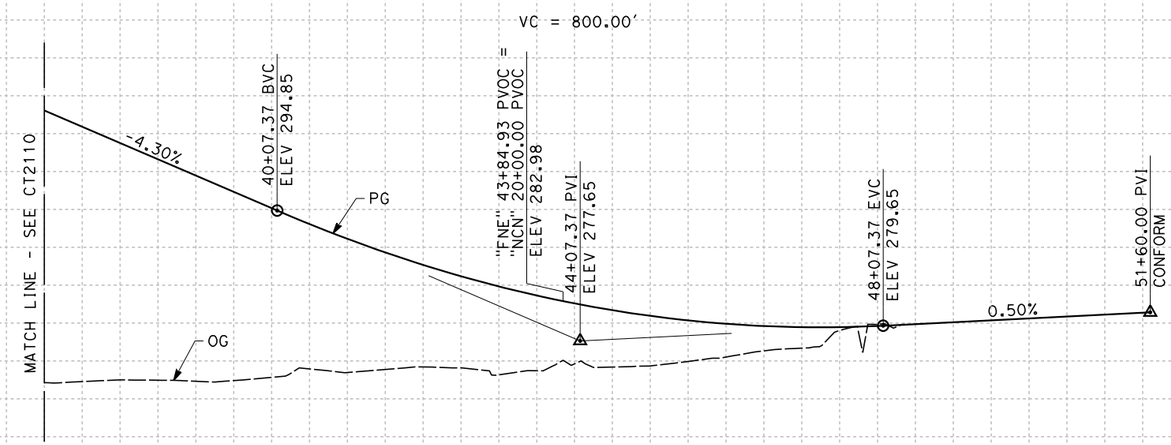

PROFILE

"FNE" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION		7	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	TOTAL
CY	Exc																	
	Emb																	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. MONG
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION PROFILE
E NEBRASKA AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2111
SCALE AS SHOWN
SHEET NO. 25 OF 32

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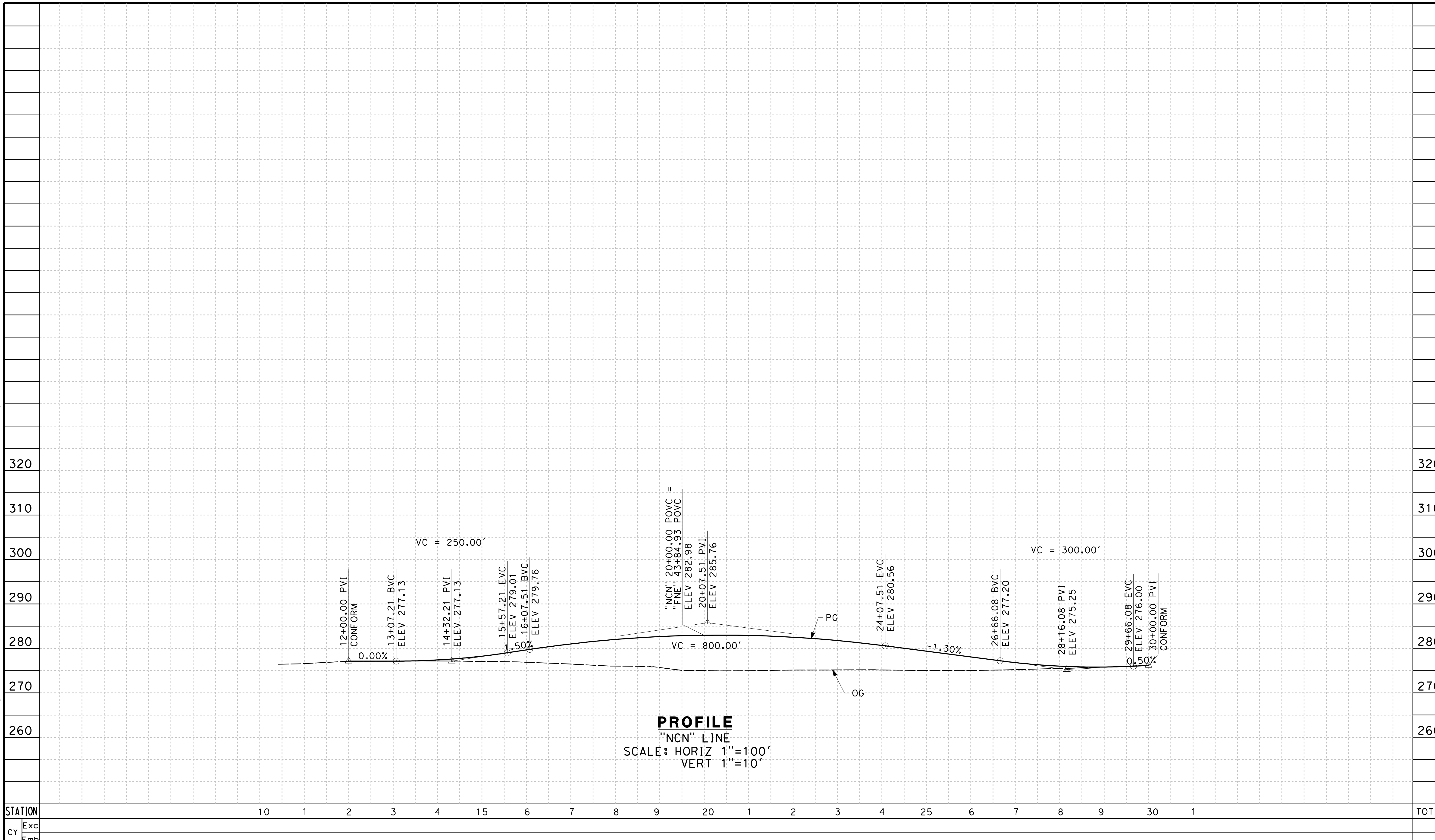


PROFILE
"NCN" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION
-
NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

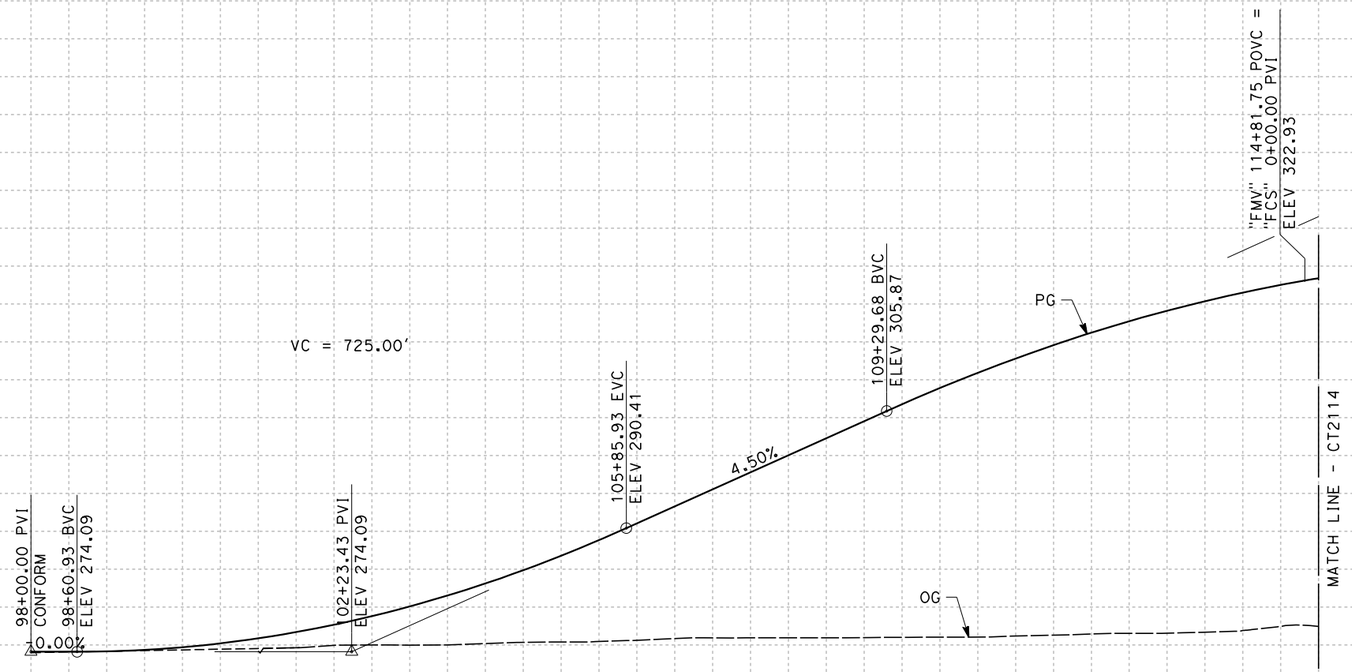
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
ROADWAY PROFILE
S CHESTNUT AT E NEBRASKA AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2112
SCALE AS SHOWN
SHEET NO. 26 OF 32

eron.sudhausen 12/27/2013 2:45:50 PM c:\pwworking\hmm\external\eron.sudhausen-arup.com\d0125352\FB-CT-2112-M.dgn

NOTES:

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER BNSF IS 24.0' FROM TOP OF RAIL



PROFILE
"FMV" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION		8	9	100	1	2	3	4	105	6	7	8	9	110	1	2	3	4	115	TOTAL
CY	Exc																			
	Emb																			

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION PROFILE
E MOUNTAIN VIEW AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2113
SCALE AS SHOWN
SHEET NO. 27 OF 32

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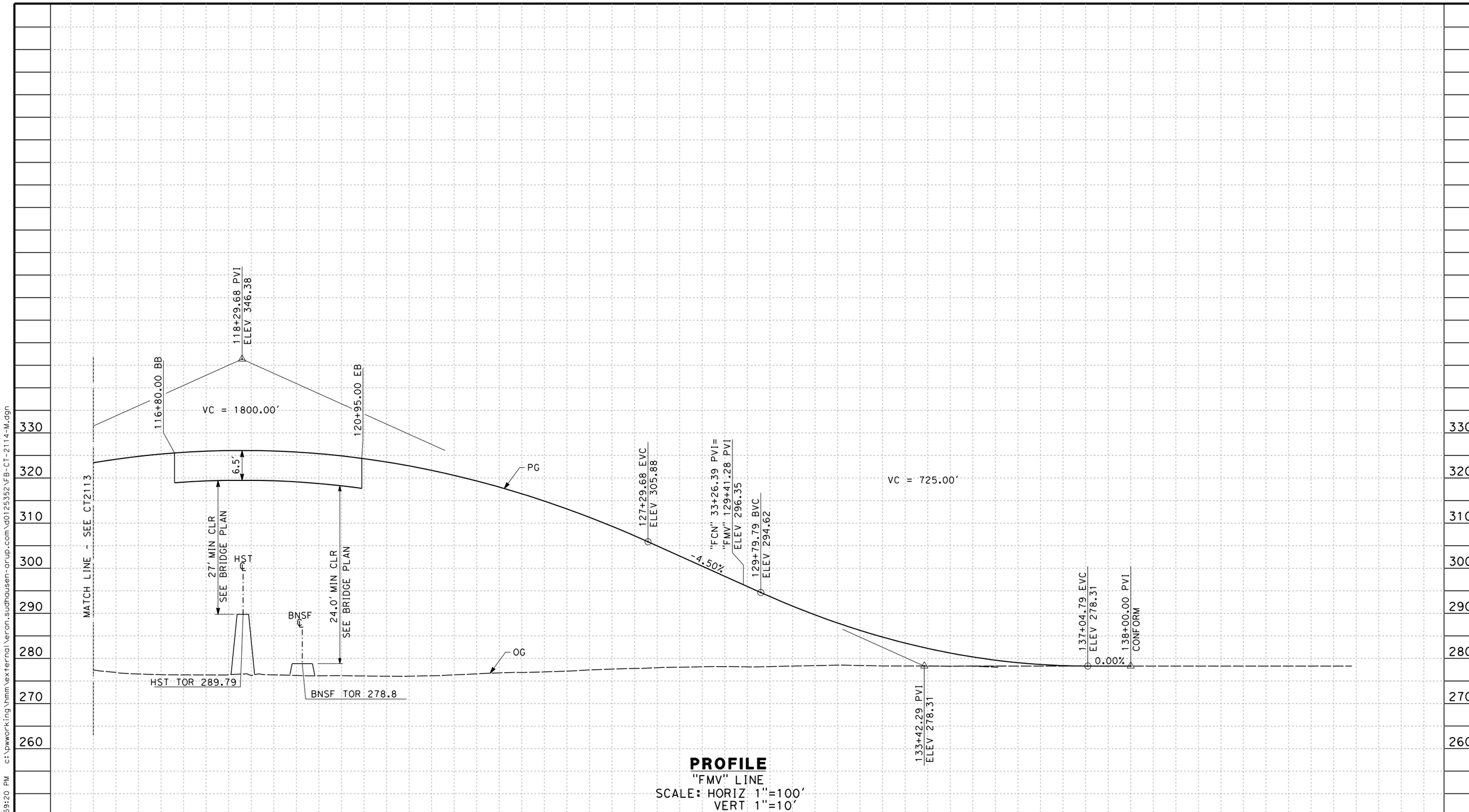

PROFILE
"FMV" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
GRADE SEPARATION PROFILE
E MOUNTAIN VIEW AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2114
SCALE AS SHOWN
SHEET NO. 28 OF 32

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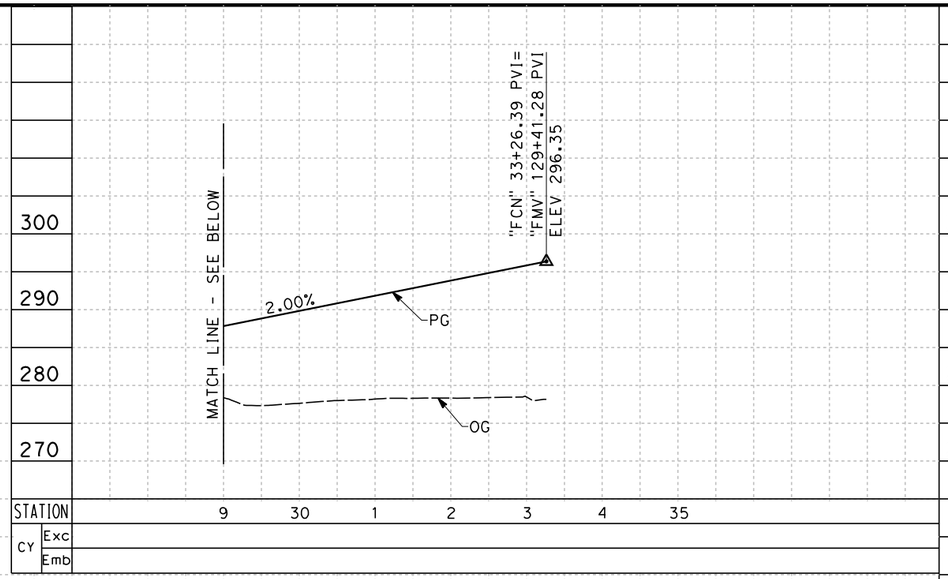

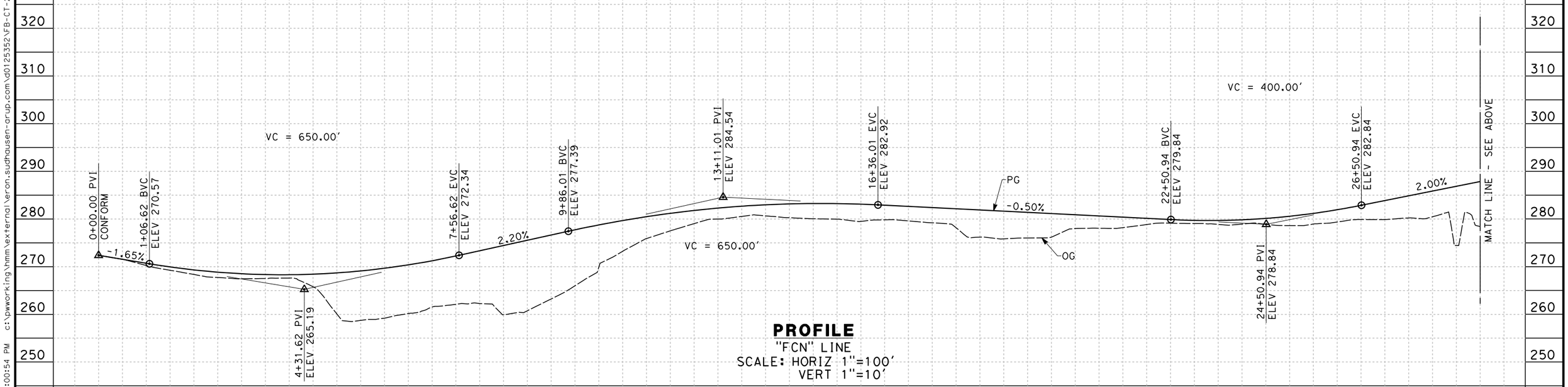

PROFILE
"FCN" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
ROADWAY PROFILE
S CHESTNUT AVE (NORTH)

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2115
SCALE AS SHOWN
SHEET NO. 29 OF 32

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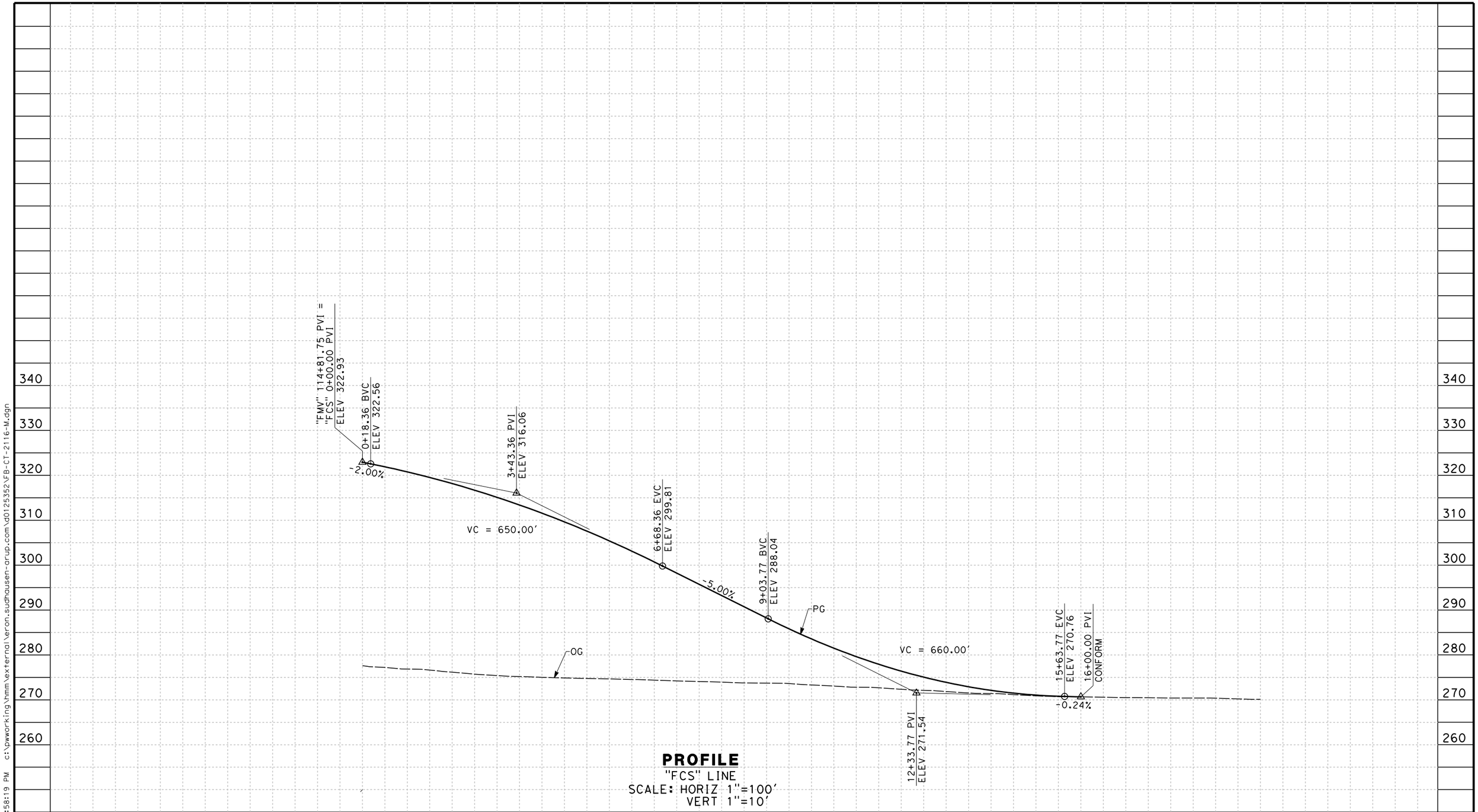


PROFILE
"FCS" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
ROADWAY PROFILE
S CHESTNUT AVE (SOUTH)

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2116
SCALE AS SHOWN
SHEET NO. 30 OF 32

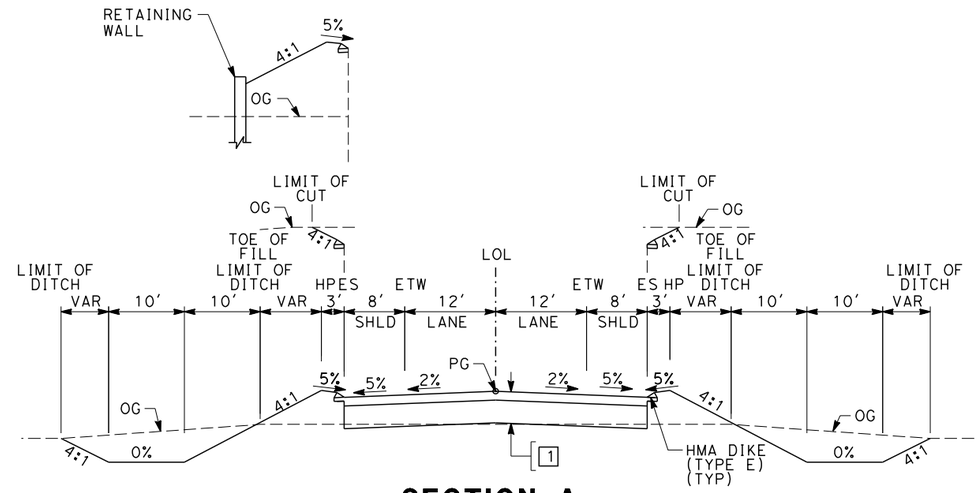
eron.sudhausen 12/27/2013 2:58:19 PM c:\pwworking\hmm\external\eron.sudhausen-arup.com\d0125352\FB-CT-2116-M.dgn

NOTES:

1. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. PAVEMENT SECTIONS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. EXACT DIMENSION AND MATERIAL OF THE PAVEMENT SECTION TO BE CONFIRMED.

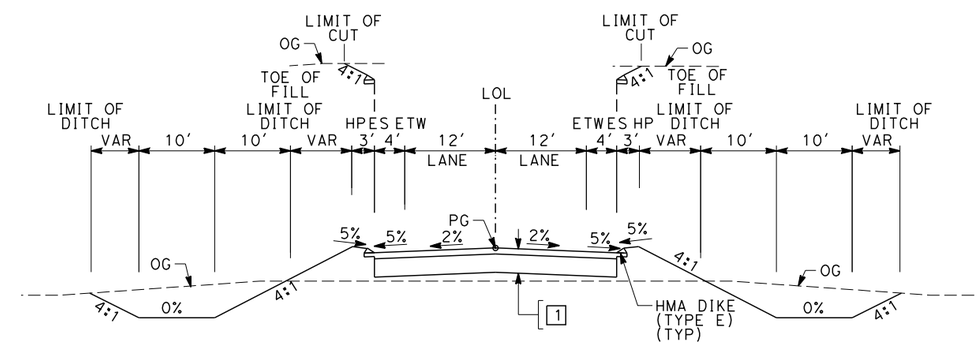
STRUCTURAL SECTIONS
TYPICAL ROADWAY

[1] 0.60' HMA (TYPE A)
1.50' CL2 AB



SECTION A

"FLI" 10+00.00 TO 20+28.25
"FLI" 24+68.25 TO 36+00.00
"FAD" 10+50.00 TO 20+79.35
"FAD" 24+59.35 TO 36+00.00
"FNE" 10+00.00 TO 30+55.00
"FNE" 34+60.00 TO 43+50.00
"FMV" 102+00.00 TO 116+80.00
"FMV" 120+95.00 TO 133+30.00
"FCN" 28+50.00 TO 33+26.39
"FCS" 0+00.00 TO 13+00.00
"FMN" 104+00.00 TO 109+00.00
"FMN" 123+41.50 TO 130+00.00
"FFL" 7+00.00 TO 21+45.00
"FFL" 25+75.00 TO 37+00.00

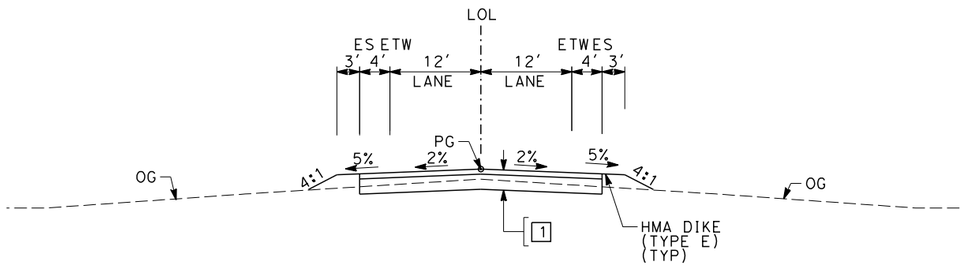


SECTION B

"FSO" 14+00.00 TO 22+67.50
"FSO" 26+42.50 TO 38+00.00

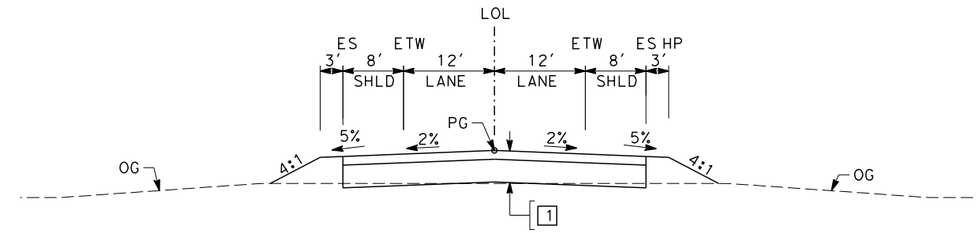
TABLE OF DESIGN SPEEDS

STREET NAME	ALIGNMENT DESIGNATION	DESIGN SPEED	CRITERIA/JURISDICTION
E LINCOLN AVE	FLI	55	AASHTO/FRESNO COUNTY
S MAPLE AVE AT E LINCOLN AVE	FLIM	55	AASHTO/FRESNO COUNTY
S CEDAR AVE AT E LINCOLN AVE	FLIC	55	AASHTO/FRESNO COUNTY
E ADAMS AVE	FAD	55	AASHTO/FRESNO COUNTY
S MAPLE AVE AT E ADAMS AVE	FADM	55	AASHTO/FRESNO COUNTY
S CEDAR AVE AT E ADAMS AVE	FADC	55	AASHTO/FRESNO COUNTY
E SOUTH AVE	FSO	55	AASHTO/FRESNO COUNTY
S MAPLE AVE AT E SOUTH AVE	FSOM	55	AASHTO/FRESNO COUNTY
S CEDAR AVE AT E SOUTH AVE	FSOC	55	AASHTO/FRESNO COUNTY
E MANNING AVE	FMN	55	AASHTO/FRESNO COUNTY
S MAPLE AVE AT E MANNING AVE	FMM	55	AASHTO/FRESNO COUNTY
E FLORAL AVE	FFL	65	AASHTO/FRESNO COUNTY
E NEBRASKA AVE	FNE	65	AASHTO/FRESNO COUNTY
S CHESTNUT AVE AT E NEBRASKA AVE	NCN	65	AASHTO/FRESNO COUNTY
E MOUNTAIN VIEW AVE	FMV	65	AASHTO/FRESNO COUNTY
S CHESTNUT AVE	FCN/FCS	65/55	AASHTO/FRESNO COUNTY



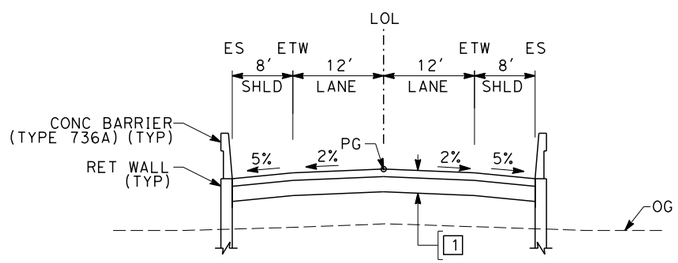
SECTION C

"NCN"	12+00.00	TO	30+00.00	"FSO"	8+50.00	TO	14+00.00
"FLIM"	2+00.00	TO	12+50.00	"FSO"	38+00.00	TO	41+00.00
"FADM"	2+00.00	TO	13+00.00	"FFL"	3+00.00	TO	7+00.00
"FMM"	3+00.00	TO	13+00.00	"FFL"	37+00.00	TO	42+00.00
"FSOM"	6+00.00	TO	16+50.00				



SECTION E

"FADC"	4+00.00	TO	13+00.00	"FMN"	130+00.00	TO	135+00.00
"FSOC"	7+00.00	TO	14+00.00	"FNE"	7+00.00	TO	10+00.00
"FLIC"	17+00.00	TO	23+50.00	"FNE"	43+50.00	TO	51+60.00
"FLI"	7+50.00	TO	10+00.00	"FMV"	98+00.00	TO	102+00.00
"FLI"	36+00.00	TO	39+00.00	"FMV"	133+30.00	TO	138+00.00
"FAD"	7+50.00	TO	10+50.00	"FCS"	13+00.00	TO	16+00.00
"FAD"	36+00.00	TO	39+00.00	"FCN"	00+00.00	TO	28+50.00



SECTION D

"FMN" 109+00.00 TO 113+96.50

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. CANNON
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BROWN
IN CHARGE R. COFFIN
DATE 03/28/14

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
MONMOUTH SUBSECTION
ALIGNMENT M
ROADWAY / GRADE SEPARATION
TYPICAL CROSS SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CT3011
SCALE NO SCALE
SHEET NO. 32 OF 32

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